

BAB 5

PENUTUP

5.1. Kesimpulan

Penelitian ini mengilustrasikan bagaimana faktor situasional, yaitu pengaruh interpersonal, daya tarik visual, dan portabilitas dapat memicu perilaku pembelian impulsif konsumen dalam *m-commerce* Shopee. Penelitian ini memberikan dasar teoritis untuk memahami pengaruh faktor situasional terhadap motivasi konsumen yang dijabarkan pada *hedonic browsing* dan *utilitarian browsing* dan pada akhirnya kepada dorongan pembelian secara impulsif. Penting bagi penelitian masa depan untuk mengeksplorasi faktor situasional tambahan yang dapat memengaruhi motivasi konsumen dalam perdagangan *m-commerce*.

Sebagian besar responden pada penelitian ini berusia 18-27 tahun dengan jenis kelamin perempuan dan sebagian besar responden belum bekerja. Sebagian besar responden memiliki pendapatan atau uang saku yang diperoleh setiap satu bulan sebanyak Rp 1.000.000 – Rp 3.000.000 dan pengeluaran pribadi selama satu bulan sebanyak < Rp 1.000.000, berbeda 1 responden dari yang memiliki pengeluaran pribadi selama satu bulan sebesar Rp 1.000.001 – Rp 1.500.000.

Dalam penelitian ini, hasil rata-rata untuk variabel PI (pengaruh interpersonal) adalah 4,1138 termasuk dalam kategori tinggi. Hasil rata-rata untuk variabel DTV (daya tarik visual) adalah 4,068967 termasuk ke dalam kategori tinggi. Hasil rata-rata untuk variabel PB (portabilitas) adalah 4,2552 dan termasuk ke dalam kategori sangat tinggi. Hasil rata-rata untuk variabel HB (*hedonic browsing*) adalah 3,4569 dan termasuk ke dalam kategori tinggi. Hasil rata-rata untuk variabel UB (*utilitarian browsing*) adalah 4,2414 dan termasuk ke dalam kategori sangat tinggi. Hasil rata-rata untuk variabel DPI (dorongan pembelian impulsif) adalah 3,6299 dan termasuk ke dalam kategori tinggi. Dari keenam variabel yang diteliti, rata-rata total variabel PB dan UB berada pada kategori sangat tinggi, sedangkan rata-rata total variabel PI, DTV, HB, dan DPI berada pada kategori tinggi.

Hasil dari regresi linear berganda pada variabel PI adalah variabel ini memiliki pengaruh positif dan signifikan terhadap variabel HB dan UB. Variabel DTV juga memiliki pengaruh positif dan signifikan terhadap variabel HB dan UB. Sedangkan variabel PB tidak memiliki pengaruh dan tidak signifikan terhadap variabel HB, namun memiliki pengaruh positif dan signifikan terhadap variabel UB. Variabel HB memiliki pengaruh positif dan signifikan terhadap variabel HB dan DPI. Variabel UB tidak memiliki pengaruh dan tidak signifikan terhadap variabel DPI, namun memiliki pengaruh tidak langsung terhadap variabel DPI melalui variabel HB sebagai variabel mediasi.

5.2. Implikasi Manajerial

Dari sudut pandang praktis, penelitian ini dapat membantu perusahaan *m-commerce* untuk menargetkan strategi pemasaran mereka dalam konteks seluler, terutama pada *m-commerce* Shopee. Menurut hasilnya, ada beberapa faktor situasi yang dapat diambil untuk meningkatkan nilai dalam *m-commerce*, seperti pengaruh interpersonal dan daya tarik visual yang semuanya dianggap sebagai pendorong utama nilai hedonis dan nilai utilitarian konsumen dan berpengaruh signifikan terhadap pembelian impulsif konsumen.

Berdasarkan hal di atas, *m-commerce* perlu merancang desain antarmuka yang lebih menarik untuk mendorong konsumen untuk melakukan *browsing* lebih lama dan pada akhirnya melakukan pembelian di dalam *e-commerce*. Selain itu, *m-commerce* dapat mengatur dan mengadakan pesta belanja sebelum hari libur dan menawarkan hadiah kepada konsumen yang berbagi informasi pembelian dengan orang lain dari aplikasi belanja seluler mereka, yang dapat mendorong konsumen untuk berbagi informasi belanja mereka untuk meningkatkan efek pengaruh interpersonal.

Hasil penelitian ini juga mengungkapkan bahwa portabilitas mempunyai dampak yang signifikan dalam meningkatkan nilai-nilai utilitarian konsumen dan kemudian secara tidak langsung mendorong nilai-nilai hedonis mereka. Untuk meningkatkan portabilitas perangkat seluler, pertama, produsen dapat mencoba

memproduksi perangkat seluler yang lebih ringan, yang membantu pengguna untuk mencari sesuatu dengan lebih nyaman. Kedua, perusahaan-perusahaan ini dapat bekerja sama dengan operator jaringan seluler untuk menghasilkan kecepatan jaringan seluler yang tinggi untuk menjadikan ponsel portabel dan mudah dinavigasi kapanpun dan dimanapun. Selain itu, portabilitas berarti pengguna dapat melakukan berbagai hal melalui perangkat seluler tanpa batasan waktu dan ruang. *M-commerce* dapat menambahkan banyak fitur khusus untuk membantu pengguna melakukan apa pun yang ingin mereka lakukan, seperti membayar tagihan secara *online*, ketersediaan pinjaman *online*, dan berbagai kemudahan lainnya.

5.3. Keterbatasan Penelitian

Menyadari bahwa semua penelitian memiliki keterbatasan yang berdampak pada penemuan yang didapat, peneliti menyajikan beberapa keterbatasan utama di dalam penelitian ini.

1. Dalam penelitian ini objek yang diteliti hanya berfokus pada *m-commerce* Shopee dan bukan pada *e-commerce* lainnya yang dapat diakses melalui perangkat selain seluler. Sehingga penelitian ini terbatas pada satu *m-commerce* dari banyaknya *e-commerce* lain. Oleh karena itu, penelitian ini tidak dapat digeneralisasikan pada *e-commerce* lainnya.
2. Dalam penelitian ini *r-adjusted square* dari semua hasil analisis cukup rendah sehingga diperlukan variabel lain yang dapat memengaruhi variabel dependen (*hedonic browsing*, *utilitarian browsing*, dan dorongan pembelian impulsif) dengan lebih optimal.

5.4. Saran Penelitian Kedepan

Karena terdapat Batasan-batasan pada penelitian ini, diharapkan untuk ke depannya, penelitian dapat mengembangkan dan menghilangkan keterbatasan yang ada. Ada beberapa saran untuk penelitian selanjutnya berkaitan dengan keterbatasan penelitian ini, yaitu:

1. Pada penelitian ke depan dapat mengembangkan penelitian dengan meneliti *e-commerce* Shopee atau *e-commerce* lainnya sehingga dapat diperoleh perbandingan dan dapat mengeksplorasi kemungkinan perbedaan dalam hal perilaku pembelian konsumen.
2. Pada penelitian ke depan dapat menggali variabel-variabel independen lain di luar penelitian ini misalnya promosi dan tekanan waktu untuk menemukan variabel independen apa saja yang dapat memberikan pengaruh lebih optimal pada variabel dependen (*hedonic browsing*, *utilitarian browsing*, dan dorongan pembelian impulsif).

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LAMPIRAN

KUESIONER

Kuesioner ini dibagikan dengan tujuan untuk memperoleh data yang diperlukan berkaitan dengan penelitian yang dilakukan dengan judul Pengaruh Faktor Situasi Terhadap *Hedonic Browsing* dan *Utilitarian Browsing* Terkait Dengan Pembelian Secara Impulsif Pada *M-Commerce* Shopee Setelah Terjadi Pandemi Covid-19, sebagai syarat dalam memenuhi persyaratan mencapai Derajat Sarjana Ekonomi (S1) Pada Program Studi Ekonomi Management Fakultas Bisnis dan Ekonomika Universitas Atma Jaya Yogyakarta.

Terimakasih atas ketersediaan Anda untuk menjawab kuesioner ini.

a. Pertanyaan *Screening*

1.	Apakah Anda pernah menggunakan atau mengunjungi <i>m-commerce</i> Shopee pada 1 atau 2 tahun terakhir? (<i>m-commerce</i> merupakan platform belanja <i>online</i> yang dapat diakses melalui <i>handphone</i>).
	a. Pernah
	b. Tidak pernah
2.	Apakah Anda pernah melakukan pembelian pada <i>m-commerce</i> Shopee pada 1 atau 2 tahun terakhir? (<i>m-commerce</i> merupakan platform belanja <i>online</i> yang dapat diakses melalui <i>handphone</i>).
	a. Pernah
	b. Tidak pernah

b. Pertanyaan Data Diri Responden

1.	Apa jenis kelamin Anda?
	a. Perempuan
	b. Laki-laki
2.	Berapa usia Anda?

	a.	18 – 26
	b.	27 – 42
	c.	43 – 58
	d.	59 – 68
3.	Apakah Anda sudah bekerja?	
	a.	Sudah bekerja
	b.	Belum bekerja
4.	Berapakah pendapatan / uang saku yang Anda peroleh setiap 1 bulan?	
	a.	< Rp 1.000.000
	b.	Rp 1.000.001 - Rp 3.000.000
	c.	Rp 3.000.001 - Rp 5.000.000
	d.	> Rp 5.000.000
5.	Berapa pengeluaran pribadi (diri sendiri) selama 1 bulan?	
	a.	< Rp 1.000.000
	b.	Rp 1.000.001 – Rp 1.500.000
	c.	Rp 1.500.001 – Rp 2.000.000
	d.	Rp 2.000.001 – RP 2.500.000
	e.	> Rp 2.500.000

c. Pertanyaan Pengaruh Interpersonal

Pilihan jawaban berupa:
1 = sangat tidak setuju
2 = tidak setuju
3 = netral
4 = setuju
5 = sangat setuju

1. Hampir semua teman/rekan saya menggunakan layanan *m-commerce* Shopee.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

2. Hampir semua teman/rekan saya berpikir menggunakan layanan *m-commerce* Shopee adalah ide yang bagus.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

3. Teman/rekan saya berpikir bahwa kita semua harus menggunakan layanan *m-commerce* Shopee.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

4. Beberapa teman/rekan saya menyarankan saya untuk mencoba layanan *m-commerce* Shopee.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

d. Pertanyaan Daya Tarik Visual

Pilihan jawaban berupa:
1 = sangat tidak setuju
2 = tidak setuju
3 = netral
4 = setuju
5 = sangat setuju

1. Tampilan *m-commerce* Shopee menyenangkan.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

2. Tampilan visual *m-commerce* Shopee menyajikan desain visual yang menyenangkan.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

3. Tampilan visual *m-commerce* Shopee menarik.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

e. Pertanyaan Portabilitas

Pilihan jawaban berupa:
1 = sangat tidak setuju
2 = tidak setuju
3 = netral
4 = setuju
5 = sangat setuju

1. *M-commerce* Shopee dapat digunakan secara praktis, karena saya dapat menggunakannya tanpa kesulitan dimanapun saya berada.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

2. Menggunakan *m-commerce* Shopee di luar rumah / tempat kerja tidak menimbulkan masalah bagi saya.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

3. Saya merasa nyaman menggunakan *m-commerce* Shopee karena *m-commerce* Shopee tidak membuat saya bergantung pada instalasi tetap (bisa menggunakan *website* sehingga tidak perlu melakukan pengunduhan atau *download* aplikasi Shopee pada HP).

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

f. Pertanyaan *Hedonic Browsing*

Pilihan jawaban berupa:
1 = sangat tidak setuju
2 = tidak setuju
3 = netral
4 = setuju
5 = sangat setuju

1. Saat menjelajahi *m-commerce* Shopee, saya bisa melupakan masalah saya dan saya merasa tenang.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

2. Saya menikmati penjelajahan *m-commerce* Shopee sampai saya lupa waktu.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

3. Saya melihat-lihat barang pada *m-commerce* Shopee hanya untuk bersenang-senang.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

4. Selama menjelajahi *m-commerce* Shopee saya sangat senang; menjelajahi *m-commerce* Shopee seperti sedang melakukan permainan.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

g. Pertanyaan *Utilitarian Browsing*

Pilihan jawaban berupa:
1 = sangat tidak setuju
2 = tidak setuju
3 = netral
4 = setuju
5 = sangat setuju

1. Saya menjelajahi situs belanja *m-commerce* Shopee untuk membeli barang dengan harga dan kualitas yang lebih baik.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

2. Saya menjelajahi situs belanja *m-commerce* Shopee untuk mengumpulkan informasi tentang produk.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

3. Saya menjelajahi situs belanja *m-commerce* Shopee untuk membandingkan satu toko dengan toko lainnya yang berbeda sebelum melakukan pembelian.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

4. Saya menjelajahi *m-commerce* Shopee untuk mendapatkan nilai tambah sebanyak-banyaknya.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

5. Saya berbelanja di *m-commerce* Shopee karena efisien.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju



h. Pertanyaan Dorongan Pembelian Impulsif

Pilihan jawaban berupa:
1 = sangat tidak setuju
2 = tidak setuju
3 = netral
4 = setuju
5 = sangat setuju

1. Saat menjelajahi *m-commerce* Shopee, saya memiliki keinginan untuk membeli barang lain atau tambahan selain dari daftar belanja yang sudah saya susun.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

2. Saat menjelajahi *m-commerce* Shopee, saya memiliki keinginan untuk membeli barang-barang lain yang tidak berkaitan dengan daftar belanja saya.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

3. Saat menjelajahi *m-commerce* Shopee, saya memiliki kecenderungan untuk membeli barang di luar daftar belanja saya.

Sangat tidak setuju	1	2	3	4	5	Sangat setuju

DATA MENTAH

8	7	6	5	4	3	2	1	No.
Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Apakah Anda pernah menggunakan atau mengunjungi <i>m-commerce</i> Shopee pada 1
Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Apakah Anda pernah melakukan pembelian pada <i>m-commerce</i> Shopee pada 1 atau 2 tahun
Perempuan	Laki-laki	Laki-laki	Perempuan	Perempuan	Laki-laki	Laki-laki	Perempuan	Apakah jenis kelamin Anda?
43 - 58	59 - 68	59 - 68	43 - 58	27 - 42	18 - 26	18 - 26	18 - 26	Berapakah usia Anda?
Belum Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Belum Bekerja	Apakah Anda telah bekerja?
Rp 3.000.000 1 - Rp 0	> Rp 5.000.000 0	> Rp 5.000.000 0	Rp 1.000.000 1 - Rp 0	Rp 1.000.000 0	> Rp 5.000.000 0	Rp 3.000.000 1 - Rp 0	Rp 3.000.000 1 - Rp 0	Berapakah pendapatan / uang saku yang Anda peroleh setiap 1 bulan?
Rp 2.000.000 1 - Rp 0	> Rp 2.500.000 0	> Rp 2.500.000 0	< Rp 1.000.000 0	< Rp 1.000.000 0	> Rp 2.500.000 0	Rp 2.000.000 1 - Rp 0	Rp 2.000.000 1 - Rp 0	Berapakah pengeluaran pribadi Anda selama 1 bulan?

19	18	17	16	15	14	13	12	11	10	9
Ya	Tidak	Ya	Ya	Ya						
Ya	Ya	Ya	Ya	Ya	Ya	Tidak	Ya	Ya	Ya	Ya
Perempuan	Perempuan	Perempuan	Laki-laki	Laki-laki	Laki-laki	Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan
18 - 26	18 - 26	18 - 26	27 - 42	27 - 42	43 - 58	43 - 58	18 - 26	18 - 26	43 - 58	43 - 58
Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja							
Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 0					
Rp 2.000.000 1 - Rp	Rp 2.000.000 1 - Rp	> Rp 2.500.000 0	Rp 2.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.500.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp < Rp 1.000.000 0	Rp > Rp 2.500.000 0

30	29	28	27	26	25	24	23	22	21	20
Y _a	Tidak Y _a	Y _a	Y _a							
Y _a										
Laki-laki	Perempuan	Perempuan	Laki-laki	Laki-laki	Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan	Perempuan
43 - 58	27 - 42	18 - 26	43 - 58	43 - 58	27 - 42	18 - 26	18 - 26	27 - 42	18 - 26	18 - 26
Sudah Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja
Rp 3.000.00 1 - Rp	Rp 1.000.00 1 - Rp	Rp 1.000.00 1 - Rp	Rp 1.000.00 1 - Rp	Rp 3.000.00 1 - Rp	Rp 1.000.00 1 - Rp	Rp 3.000.00 1 - Rp	Rp 3.000.00 1 - Rp	Rp 3.000.00 1 - Rp	Rp 1.000.00 1 - Rp	Rp 1.000.00 1 - Rp
> Rp 2.500.00 0	Rp 1.000.00 1 - Rp	> Rp 2.500.00 0	< Rp 1.000.00 0	> Rp 2.500.00 0	< Rp 1.000.00 0	> Rp 2.500.00 0	Rp 2.000.00 1 - Rp	> Rp 2.500.00 0	Rp 1.500.00 1 - Rp	< Rp 1.000.00 0

41	40	39	38	37	36	35	34	33	32	31
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a
Perempuan	Perempuan	Laki-laki	Laki-laki	Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Belum Bekerja	Sudah Bekerja	Belum Bekerja	Sudah Bekerja	Sudah Bekerja
Rp 1.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp < Rp 0	Rp 1.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 3.000.000 1 - Rp			
Rp 1.500.000 1 - Rp	> Rp 2.500.000 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	< Rp 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.500.000 1 - Rp	Rp 2.000.000 1 - Rp	> Rp 2.500.000 0

52	51	50	49	48	47	46	45	44	43	42
Ya	Ya	Ya	Ya	Ya	Ya	Tidak	Ya	Ya	Ya	Ya
Ya	Ya	Ya	Ya	Ya	Ya		Ya	Ya	Ya	Ya
Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Belum Bekerja
< Rp 1.000.000 0	Rp 1.000.000 0	Rp 1.000.000 0	< Rp 1.000.000 0	< Rp 1.000.000 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp
Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.500.000 1 - Rp	< Rp 1.000.000 0	< Rp 1.000.000 0	Rp 1.500.000 1 - Rp	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 0	> Rp 2.500.000 0	Rp 1.000.000 1 - Rp

63	62	61	60	59	58	57	56	55	54	53
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Tidak	Y _a	Y _a	Y _a
Perempuan	Perempuan	Laki-laki	Laki-laki	Laki-laki	Laki-laki	Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja
< Rp 1.000.000 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 0				
< Rp 1.000.000 0	Rp 1.500.000 1 - Rp	Rp 1.500.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 0	Rp 2.500.000 0	> Rp 2.500.000 0	Rp 1.500.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 0	< Rp 1.000.000 0

74	73	72	71	70	69	68	67	66	65	64
Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya
Tidak	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya	Ya
Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Laki-laki	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja
< Rp 1.000.000	Rp 1.000.000	< Rp 0	< Rp 1.000.000	< Rp 0	Rp 1.000.000	< Rp 0	Rp 1.000.000	< Rp 0	Rp 1.000.000	Rp 1.000.000
< Rp 1.000.000	Rp 1.000.000	< Rp 0	< Rp 1.000.000	< Rp 0	Rp 1.000.000	< Rp 0	Rp 1.000.000	< Rp 0	Rp 1.000.000	Rp 1.000.000

	85	84	83	82	81	80	79	78	77	76	75
Ya	Ya	Ya	Ya	Ya	Ya	Tidak	Ya	Ya	Ya	Ya	Ya
Ya	Ya	Ya	Ya	Ya	Ya		Ya	Ya	Ya	Ya	Ya
Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Laki-laki		Perempuan	Perempuan	Perempuan	Perempuan	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26		18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Belum Bekerja		Belum Bekerja					
Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	< Rp 0	< Rp 0	< Rp 0	Rp 1.000.000 1 - Rp					
Rp 1.500.000 1 - Rp	< Rp 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp	< Rp 0	< Rp 0	Rp 1.000.000 1 - Rp					

96	95	94	93	92	91	90	89	88	87	86
Y _a	Y _a	Y _a								
Y _a	Y _a	Y _a								
Laki-laki	Laki-laki	Perempuan	Laki-laki	Perempuan	Laki-laki	Perempuan	Laki-laki	Perempuan	Perempuan	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Belum Bekerja	Belum Bekerja								
Rp 1.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp < Rp 0	Rp < Rp 0						
< Rp 1.000.000 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp	Rp 2.500.000 0	< Rp 1.000.000 0	Rp 1.500.000 0					

107	106	105	104	103	102	101	100	99	98	97
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a					
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a					
Laki-laki	Laki-laki	Laki-laki	Perempuan	Perempuan	Laki-laki	Perempuan	Perempuan	Laki-laki	Laki-laki	Laki-laki
18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Belum Bekerja					
Rp 1.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp < Rp 0	Rp 1.000.000 1 - Rp	Rp 5.000.000 0	Rp 1.000.000 0	< Rp 0				
Rp 1.500.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp 1.500.000 1 - Rp	Rp 1.000.000 0	Rp 2.000.000 0	Rp 1.000.000 1 - Rp	Rp 2.000.000 0	Rp 2.000.000 1 - Rp	Rp 2.500.000 0	Rp 1.500.000 1 - Rp	< Rp 0

118	117	116	115	114	113	112	111	110	109	108
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a				
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a				
Laki-laki	Perempuan	Laki-laki	Laki-laki	Perempuan	Perempuan	Laki-laki	Perempuan	Laki-laki	Laki-laki	Perempuan
18 - 26	18 - 26	18 - 26	18 - 26	27 - 42	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26	18 - 26
Belum Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Belum Bekerja	Sudah Bekerja	Sudah Bekerja	Belum Bekerja
< Rp 1.000.000 0	> Rp 5.000.000 0	< Rp 1.000.000 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp 0	Rp 1.000.000 1 - Rp 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp 0	Rp 1.000.000 1 - Rp 0
< Rp 1.000.000 0	< Rp 1.000.000 0	< Rp 1.000.000 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp 0	< Rp 1.000.000 0	Rp 1.000.000 1 - Rp 0	< Rp 1.000.000 0	< Rp 1.000.000 0	> Rp 2.500.000 0	Rp 1.500.000 1 - Rp 0

129	128	127	126	125	124	123	122	121	120	119
Ya	Ya	Tidak	Ya	Ya	Tidak	Tidak	Ya	Ya	Ya	Ya
Ya	Ya		Ya	Ya			Ya	Ya	Ya	Ya
Laki-laki	Laki-laki		Perempuan	Perempuan			Perempuan	Perempuan	Laki-laki	Laki-laki
43 - 58	27 - 42		43 - 58	27 - 42			27 - 42	27 - 42	18 - 26	18 - 26
Sudah Bekerja	Sudah Bekerja		Sudah Bekerja	Sudah Bekerja			Belum Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja
Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp		Rp 1.000.000 1 - Rp	Rp 1.000.000 1 - Rp			Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp	Rp < Rp 1.000.000 0	Rp 1.000.000 1 - Rp
> Rp 2.500.000 0	Rp 1.000.000 1 - Rp		< Rp 1.000.000 0	Rp 1.500.000 1 - Rp			> Rp 2.500.000 0	Rp 1.000.000 1 - Rp	Rp 1.000.000 0	Rp 1.000.000 1 - Rp

140	139	138	137	136	135	134	133	132	131	130
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a
Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan
43 - 58	27 - 42	27 - 42	43 - 58	43 - 58	43 - 58	43 - 58	27 - 42	59 - 68	27 - 42	27 - 42
Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja
Rp 3.000.000 1 - Rp	Rp 1.000.000 1 - Rp	> Rp 5.000.000 0	Rp 3.000.000 1 - Rp	Rp 3.000.000 1 - Rp	Rp 5.000.000 0	Rp 1.000.000 1 - Rp	> Rp 5.000.000 0	Rp 1.000.000 1 - Rp	> Rp 5.000.000 0	Rp 1.000.000 1 - Rp
> Rp 2.500.000 0	Rp 1.000.000 1 - Rp	> Rp 2.500.000 0	> Rp 2.500.000 0	Rp 1.000.000 1 - Rp	Rp 2.500.000 0	Rp 1.000.000 1 - Rp	> Rp 2.500.000 0	Rp 2.500.000 0	> Rp 2.500.000 0	Rp 2.500.000 0

151	150	149	148	147	146	145	144	143	142	141
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Tidak
Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	Y _a	
Perempuan	Perempuan	Laki-laki	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan	Perempuan
43 - 58	27 - 42	43 - 58	43 - 58	59 - 68	27 - 42	59 - 68	43 - 58	43 - 58	43 - 58	27 - 42
Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Belum Bekerja	Belum Bekerja	Belum Bekerja	Sudah Bekerja	Sudah Bekerja
Rp 3.000.000 1 - Rp	> Rp 0	Rp 3.000.00 1 - Rp	Rp 1.000.00 1 - Rp	Rp 3.000.00 1 - Rp	Rp 1.000.00 1 - Rp	> Rp 0	Rp 1.000.00 1 - Rp			
Rp 2.000.00 1 - Rp	> Rp 0	> Rp 2.500.00 0	Rp 1.500.00 1 - Rp	Rp 1.000.00 0	< Rp 1.000.00 0	> Rp 2.500.00 0	Rp 1.500.00 1 - Rp			

156	155	154	153	152
Y _a	Y _a	Y _a	Y _a	Y _a
Y _a	Y _a	Y _a	Y _a	Y _a
Laki-laki	Perempuan	Perempuan	Laki-laki	Laki-laki
43 - 58	43 - 58	27 - 42	59 - 68	27 - 42
Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja	Sudah Bekerja
Rp 3.000.00 1 - Rp	Rp 3.000.00 1 - Rp	> Rp 5.000.00 0	> Rp 5.000.00 0	Rp 1.000.00 1 - Rp
Rp 1.500.00 1 - Rp	Rp 1.500.00 1 - Rp	> Rp 2.500.00 0	> Rp 2.500.00 0	Rp 1.500.00 1 - Rp

										No
10	9	8	7	6	5	4	3	2	1	
4	5	5	3	5	5	3	5	5	5	P01
4	5	5	4	4	3	4	5	3	5	P02
5	5	5	3	4	3	2	5	3	5	P03
5	5	4	2	4	4	3	3	4	5	P04
4	5	5	4	4	5	4	5	4	5	DTV01
5	5	4	5	4	5	4	4	4	5	DTV02
5	5	5	5	4	5	4	5	4	5	DTV03
5	5	5	5	5	5	4	5	4	5	PB01
5	5	5	4	4	5	4	5	5	5	PB02
5	5	4	5	4	5	3	3	3	5	PB03
5	5	4	5	4	5	2	3	3	5	HB01
3	5	5	5	4	2	2	5	1	5	HB02
4	5	5	5	3	5	4	4	1	5	HB03
4	5	5	5	4	4	3	5	3	5	HB04
4	5	5	5	4	4	4	5	4	5	UB01
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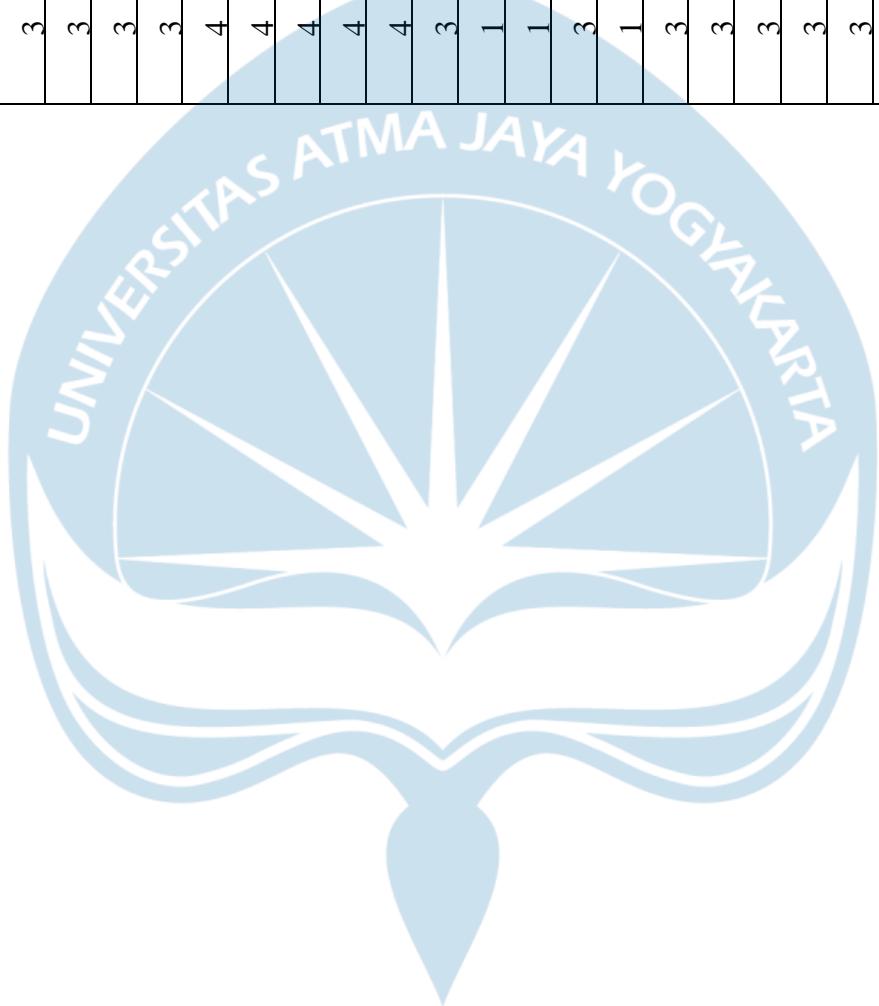
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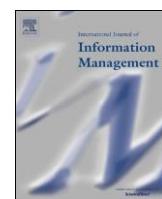
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Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing

Xiabing Zheng, Jinqi Men, Feng Yang, Xiuyuan Gong



^a School of Management, University of Science and Technology of China, #96 JinZhai Road, Baohe District, Hefei, Anhui, 230026, PR China

^b School of Business, Nanjing Normal University, #1 Wenyuan Road, Qixia District, Nanjing, Jiangsu, 210023, PR China

A B S T R A C T

Growing evidence shows that mobile commerce will increase consumers' impulse buying behavior. However, existing study examining the impact factors on individuals' impulse buying in mobile commerce is limited.

Drawing on stimulus-organism-response (S-O-R) paradigm, this study focuses on situation factors and reaction factors in mobile commerce to examine impulse buying. Building on prior literature of browsing and motivation theory, this study views hedonic browsing and utilitarian browsing as two key drivers on impulse buying in mobile commerce. This study adopts partial least squares estimation to analyze the data obtained from an online questionnaire. Two main findings emerge. First, three situation factors (portability, visual appeal and inter-personal influence) differently affect hedonic browsing and utilitarian browsing. Second, hedonic browsing directly and positively influences consumers' urge to buy impulsively, whereas utilitarian browsing indirectly influences consumers' urge to buy impulsively through hedonic browsing. Discussions, limitations, and implications are also presented in the paper.

1. Introduction

With the rapid development of wireless technology and high penetration rate of mobile devices, mobile commerce (m-commerce) has become one of the most popular channels for shopping (Wu & Wang, 2005). As of December 2017, there were 82% individuals in US using mobile devices for shopping¹ with sales amounted to over 156 billion dollars² compared to about 42 billion dollars in 2013³. The released data also showed that m-commerce had accounted for 23% of electronic commerce (e-commerce) sales during the third quarter of 2017⁴. In China, according to the statistics released on Internet, there were 676.7 billion dollars spent on mobile shopping in 2017⁵ compared to only 1.4 billion dollars in 2001. The released data also showed that m-commerce had accounted for 70.8% of e-commerce in 2017⁵. In view of the rapid and extensive development of mobile technologies and applications for m-commerce, experts and managers should further understand how consumers behave in m-commerce.

Barnes (2002) defined m-commerce as "any transaction with a monetary value either direct or indirect that is conducted over a wireless telecommunication network". Compared with the traditional online shopping, m-commerce could provide a completely new service capability, such as "location awareness, context sensing, and push delivery" (Kourouthanassis & Giaglis, 2012), which is mainly supported by the characteristic of portability of mobile device. Previous studies have explored some areas of m-commerce, such as m-commerce adoption (Liébana-Cabanillas, Marinković, & Kalinić, 2017), the evolution of consumers' trust in m-commerce (Lin, Wang, Wang, & Lu, 2014) and post-purchase experience (Tojib & Tsarenko, 2012). While these studies have spread the knowledge of m-commerce, impulse buying which was the most commonplace behaviour among purchase behaviours (Hausman, 2000), received limited attention in m-commerce. Lee et al. (2014) mentioned that m-commerce would increase impulse buying due to its characteristics, such

as high interactivity and convenience (Schwartz, 2012). However, rather limited knowledge was available concerning how situation factors and reaction factors may induce individuals to buy impulsively in m-commerce.

Singles Day shopping festival, which originated from Singles day, is a holiday for Chinese young people to celebrate their single status⁶. At the end of the 2000s, brick-and-mortar retailers discovered the opportunities in Singles day and adopted promotion tactic to attract consumers. Later, in 2009, Alibaba was the first one to decide to capitalize on Singles day and launched an online sale. According to Alibaba, "... late autumn had no recurring retail sale period. November was thus the perfect time for big online sales"⁷. On November 11, 2009, the sales in Alibaba was 7 million dollars and this figure had risen to 25.3 billion dollars on November 11, 2017⁸. Among these expenses, most of them were from m-commerce. For the Singles Day shopping festival in 2017, its m-commerce accounted for 90% of e-commerce sales⁸ compared to 42.6% of e-commerce sales in 2014⁹. The high penetration of m-commerce on Singles Day shopping festival makes it an appropriate context to explore consumers' impulse behaviour in m-commerce. However, despite the great influence of Singles Day shopping festival in m-commerce, little research has studied this phenomenon. Therefore, this study specifically examines how the situation factors and reaction factors influence consumers' impulse buying behaviour in m-commerce on Singles Day shopping festival.

Many researchers have adopted motivation theory to understand users' motivation under different stimulus and know their responses (Koo, Chung, & Nam, 2015; Lin & Lu, 2011). They discovered that both hedonic and utilitarian motivations had effects on driving people to do certain behaviours, such as shopping. Kim et al. (2007) supported these illustrations and proposed that individuals' certain behaviour was a result of their motivation for gaining information or enjoyment from the activities. Accordingly, this study views utilitarian motivation and hedonic motivation as two main drivers of consumer's impulse buying behaviour. In addition, this study extends motivation theory in the context of m-commerce and adopts hedonic browsing and utilitarian browsing as two motivation values to explore consumers' behaviour.

This study adopts S-O-R paradigm and motivation theory to explore consumers' impulse buying behaviour in the context of Singles Day shopping festival in m-commerce. The research questions of this study are: (1) What are the factors that encourage consumers to form hedonic and utilitarian motivation respectively in m-commerce on Singles Day shopping festival? (2) Do both hedonic motivation and utilitarian motivation affect consumers' impulse buying behaviour in m-commerce? (3) How do the two motivation factors (hedonic motivation and utilitarian motivation) interact in m-commerce on Singles Day shopping festival? The structure of the paper is as follows. Section 2 briefly provides the theoretical foundation. Section 3 describes the research model and hypotheses. Then in Sections 4 and 5, we report an overview of the methodology and results of empirical study, respectively. Section 6 presents discussion, implications for research and practice. Finally, this paper ends with conclusion in Section 7.

* Corresponding author.

E-mail addresses: Xzheng@gmail.com (X. Zheng), menjinqi@mail.ustc.edu.cn (J. Men), fengyang@ustc.edu.cn (F. Yang), gxiuyuan@njnu.edu.cn (X. Gong).

¹ <https://www.statista.com/statistics/809665/us-online-users-shopping-reach-by-device/>.

² <https://www.statista.com/statistics/249855/mobile-retail-commerce-revenue-in-the-united-states/>.

³ <https://ecommerce-news.es/mobile-commerce-usa-cerrara-2016-115-920-mm-facturacion-infografia-4920>.

⁴ <https://www.statista.com/topics/1185/mobile-commerce/>.

⁵ <http://www.iimedia.cn/61300.html>.

⁶ https://en.wikipedia.org/wiki/Singles%27_Day.

⁷ http://www.timeoutshanghai.com/features/Blog-Shopping_Style/40398/ What-is-1111-Singles-Day-all-about.html.

⁸ <https://finance.yahoo.com/news/young-consumers-fueled-alibabas-90-singles-day-sales-174827660.html>

2. Theoretical foundation

2.1. Channel choice

In ancient times, people exchanged their goods and services to obtain what they need (such as clothes and tools) from others. Nowadays, with the development of technology, consumers could purchase products through various channels such as e-commerce, m-commerce, and brick-and-mortar stores (Liang & Wei, 2004). Prior literature has well examined the relationship between channels and consumers' behaviour (Marriott, Williams, & Dwivedi, 2017; Shareef, Dwivedi, Kumar, & Kumar, 2017; Slade, Williams, & Dwivedi, 2013; Yang, Asaad, & Dwivedi, 2017). These studies help us to understand consumers' behaviours under different channels. Accordingly, we infer that the reason why consumers choose one specific channel is that the characteristics of the given channel meet individuals' need (Maiti & Dass, 2014).

It has been confirmed that portability and interface design (visual appeal) are two key features that consumers most appreciate in m-commerce (Okazaki & Mendez, 2013). Especially for portability, which has been regarded as the reason for consumers choosing m-commerce for shopping (Chae & Kim, 2003; Kim, Mirusmonov, & Lee, 2010; Luarn & Lin, 2005). Visual appeal is also important for m-commerce which has been verified by Cyr et al. (2006). Therefore, in this study, we regard both portability and visual appeal as the two main reasons why consumers choose to purchase on mobile device on Singles Day shopping festival. More specifically, Singles Day shopping festival begins at midnight of that day, when the weather is cold and time is late. Many consumers prepare to go to sleep so that it is sensible to choose portable mobile devices rather than cumbersome computers for shopping. Moreover, for many consumers, it is more efficient for them to pay on their smartphones than on a computer. The high proportion of m-commerce on Singles Day shopping festival confirms these points. Therefore, in this study, we examined consumers' behaviour on Singles Day shopping festival in the channel of m-commerce.

2.2. Impulse buying behaviour and situation factors

Piron (1991) defined impulse buying as "a purchase that is un-planned, the result of an exposure to a stimulus, and decided on the spot", such behaviour often resulted from specific stimulus during the shopping process (Floh & Madlberger, 2013). From the point of different stimulus, Stern (1962) proposed four distinct types of impulse buying, namely, pure impulse buying, reminder impulse buying, suggestive impulse buying and planned impulse buying. Pure impulse buying is a novelty and escape purchase that breaks a normal buying pattern which was treated as the true impulse buying (Stern, 1962). Reminder impulse buying ensues when an individual recalls the prior experience with the products when he or she saw it (Stern, 1962). Suggestive impulse buying takes place when an individual sees a product for the first time and visualizes a need for it (Stern, 1962). Planned impulse buying occurs when buyers purchase something they did not plan but take advantage of promotions (Stern, 1962). These types of impulse buying shared a common thread, that is, these are all unintended purchases. Meanwhile, during the impulse buying process, consumers perceived or noticed the stimuli, assimilated them, and then reacted (Huang, 2016a, 2016b).

The stimulus (situation factors) in Piron's (1991) definition can be the actual products, the shopping environment or the people who accompany you for shopping. In 1974, Belk viewed situation factors as "...all those factors particular to a time and place of observation which do not follow from a knowledge of personal (intra-individual) and stimulus (choice alternative) attributes and which have a demonstrable and systematic effect on current behaviour". And then, Belk (1975) divided it into five groups, namely, social surroundings, physical surroundings, temporal perspective, task definition and antecedent states. The common ground is that all these situation factors have a "demonstrable and systematic effect on current behaviour" (Belk, 1975).

Considering the relevant situation factors should take the contextual environment into account. For example, portability which was regarded by prior literature as a prerequisite for implementing the functionality of the wireless network infrastructure, increased sales through geographical targeting and temporal targeting individuals (Luo, Andrews, Fang, & Phang, 2013). In the pre-purchase stage, visual appeal was very important in appealing consumers to browse and helping consumers to find information they need efficiently. Moreover, Fang et al. (2017) mentioned that visual appeal would be a salient element that influence individuals' buying intention. Another essential factor, interpersonal influence, has an important effect on individuals' purchase behaviour, especially in collectivist countries (e.g., Singapore, China) (Lee & Kacen, 2008). Accordingly, we proposed that portability, visual appeal and interpersonal influence may play vital roles in consumers' impulse buying behaviour.

⁹ <https://zhuanlan.zhihu.com/p/30313064>

2.3. Types of online consumers and their motivation

Prior study has divided online consumers into two categories: goal- directed consumers and experiential consumers (Hoffman & Novak, 1996). Goal-directed consumers have a certain purchase plan (Olbrich & Holsing, 2011), who want to be able to achieve their consumption goals with minimal effort (Babin, Darden, & Griffin, 1994). Conversely, experiential consumers, who are more concerned about the appealing web interface design or friendly online service, view shopping as a re- creation. Comparing with the completion of the shopping task, they care more about the fun of the shopping process (Hirschman & Holbrook, 1982). These two types of online consumers relate to two types of motivations, namely, extrinsic motivation and intrinsic motivation.

Motivation refers to “enduring predispositions that arouse and direct behaviour toward certain goals” (Engel, Blackwell, & Miniard, 1995). Two types of motivation existed, namely intrinsic motivation (hedonic motivation) and extrinsic motivation (utilitarian motivation) according to an individual’s behaviour (Deci, 1975). Utilitarian motivation relates to the goal-directed buyers who tended to focus on task accomplishment or engaged in an activity because of external rewards, are more likely than others to adopt utilitarian technology or to engage in utilitarian activity (Kim, Chan, & Gupta, 2007). Hedonic motivation relates to the experiential buyers who are more likely to engage in the activity or to adopt the technology when they have experienced instant pleasure or satisfaction from it. Prior literature has adopted utilitarian value and hedonic value to examine consumers’ behaviour. For example, Huang (2016b), examined the relationships among utilitarian value, hedonic value, and consumers’ unplanned purchase behaviour. Pöyry et al. (2013) confirmed the relationships among hedonic motivation, utilitarian motivation, and purchase intention. Kim and Hwang (2012) illustrated the relationship between consumers’ value tendency (hedonic and utilitarian) and their mobile Internet service quality perceptions.

The way for consumers to access to information in online environment is browsing the website, which was the first stage of information seeking and decision making (Rowley, 2002). Browsing is an essential process for consumers to get the information they need or recreation from online store. More specifically, Park et al. (2012) explored the effect of hedonic browsing and utilitarian browsing on consumers’ impulse buying behaviour. Bloch and Richins (1983) defined browsing as “the in-store examination of a retailer’s merchandise for informational and/or recreational purposes without an immediate intent to buy” and divided it into two types, namely, leisure activities and external search behaviour, whose examples included browsing a store to gather information or unwind. In line with this definition, we infer that in m-commerce, the definitions of utilitarian motivation and hedonic motivation are equal to browsing to obtain information and browsing for recreation. Therefore, in this study, we follow the study of Park et al. (2012) and view hedonic browsing and utilitarian browsing as motivation cues (hedonic motivation and utilitarian motivation), which affect consumers’ impulse buying behaviour.

2.4. The stimulus-organism-response framework

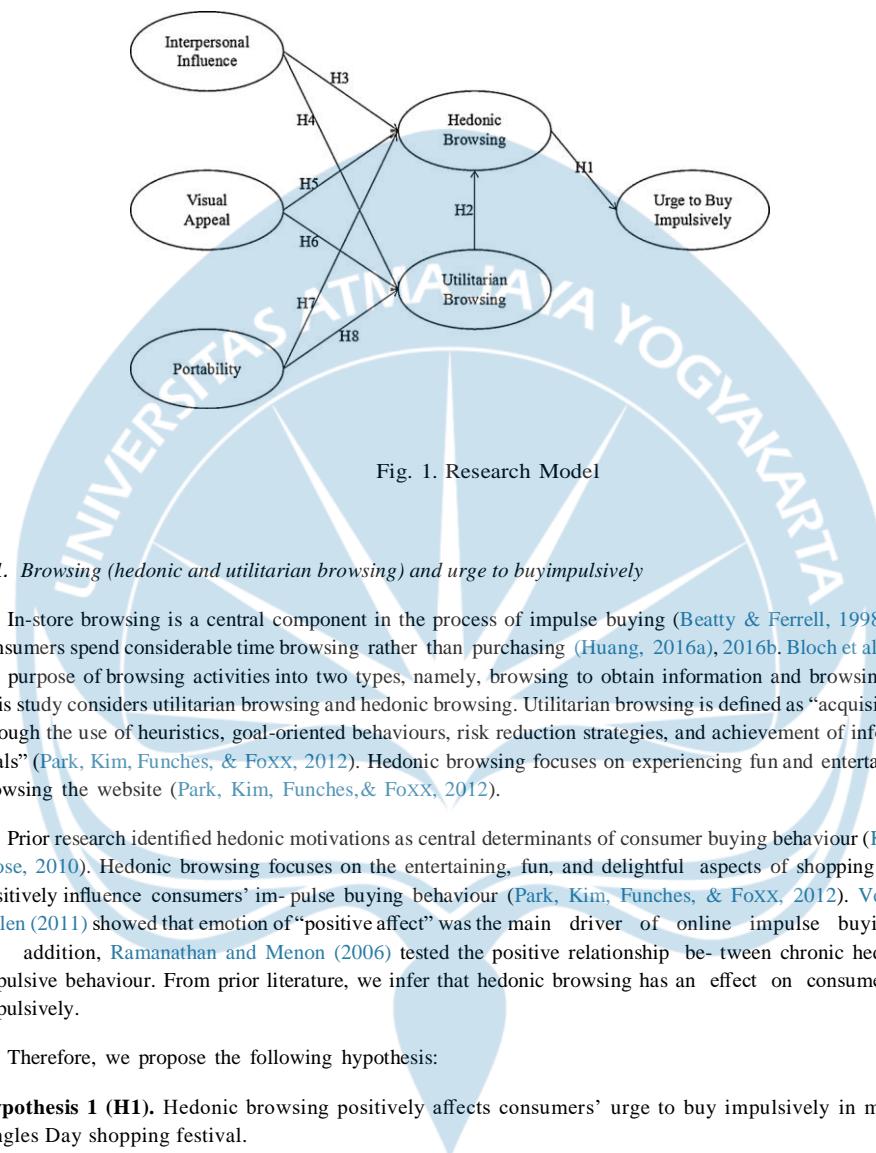
The S-O-R paradigm, which derived from environmental psychology, posits that stimulus will induce individuals’ perceptions and then influence their response (approach or avoidance) (Fang, 2014). Stimulus (situation factors) was defined as “...all those factors particular to a time and place of observation which do not follow from a knowledge of personal (intra-individual) and stimulus (choice alter-native) attributes and which have a demonstrable and systematic effect on current behaviour” (Belk, 1974). In this model, we view the situation factors (portability, visual appeal and interpersonal influence) as stimulus which affect consumers’ cognitive and affective perceptions.

Organism is an internal state of individual which is represented by affective and cognitive states. It is also regarded as an intermediary state between the stimulus and responses (Hsin Chang & Wen Chen, 2008). Cognitive state is a process of dealing with the existing in- formation (Fang, 2014), while the emotional state reflects individuals’ feeling or emotion like satisfaction and happiness (Kamboj, Sarmah, Gupta, & Dwivedi, 2018). In this study, we view hedonic browsing and utilitarian browsing (hedonic motivation and utilitarian motivation) as the organism factors, which is supported by early research (Chiu, Hsieh, Li, & Lee, 2005).

Reaction is the response to their perceptions based on the different situation factors (Parboteeah, Valacich, & Wells, 2009). In the process of impulse buying, the response of consumers can be divided into twofold. The first stage is urge to buy impulsively (Rook, 1987) which is defined by Beatty and Ferrell (1998) as “a state of desire that is experienced upon encountering an object in the environment”. The next stage is the actual impulse purchase, which only occurs after an individual experience the urge to buy impulsively (Rook, 1987). Previous studies adopted behavioural intentions rather than actual behaviours todo the research (Chen & Chang, 2018; Chen & Lin, 2018; Dwivedi, Tamilmani, Williams, & Lal, 2014; Hsiao & Chen, 2016, 2018). There are two reasons. Firstly, behaviour intention has been assigned as a substitute of actual behaviour in marketing research (Fishbein & Ajzen, 1975). Secondly, it has been argued that it is problematic to observe the actual behaviour in a controlled environment (Luo, 2005). In addition, individuals’ reactions or behaviours may be biased because they need to behave or react in ways which society expects (Smith & Bolton, 1998). Therefore, this study adopts urge to buy impulsively to measure individuals’ impulsivity rather than using impulse buying behaviour.

3. Research model and hypotheses

Fig. 1 shows our theoretical model. More specifically, hedonic, and utilitarian browsing (hedonic and utilitarian motivations) are influenced by three situation factors (portability, interpersonal influence and visual appeal). Impulse buying behaviour is directly determined by hedonic browsing, and indirectly determined by utilitarian browsing. The definitions and interrelationships of the constructs in this research model are addressed as follows.



3.1. Browsing (hedonic and utilitarian browsing) and urge to buy impulsively

In-store browsing is a central component in the process of impulse buying (Beatty & Ferrell, 1998) because most consumers spend considerable time browsing rather than purchasing (Huang, 2016a, 2016b). Bloch et al. (1989) divided the purpose of browsing activities into two types, namely, browsing to obtain information and browsing for recreation. This study considers utilitarian browsing and hedonic browsing. Utilitarian browsing is defined as “acquisition of products through the use of heuristics, goal-oriented behaviours, risk reduction strategies, and achievement of information search goals” (Park, Kim, Funches, & Foxx, 2012). Hedonic browsing focuses on experiencing fun and entertainment through browsing the website (Park, Kim, Funches, & Foxx, 2012).

Prior research identified hedonic motivations as central determinants of consumer buying behaviour (Kukar Kinney & Close, 2010). Hedonic browsing focuses on the entertaining, fun, and delightful aspects of shopping behaviour, and positively influence consumers' impulse buying behaviour (Park, Kim, Funches, & Foxx, 2012). Verhagen and van Dolen (2011) showed that emotion of “positive affect” was the main driver of online impulse buying behaviour. In addition, Ramanathan and Menon (2006) tested the positive relationship between chronic hedonic goals and impulsive behaviour. From prior literature, we infer that hedonic browsing has an effect on consumers'urge to buy impulsively.

Therefore, we propose the following hypothesis:

Hypothesis 1 (H1). Hedonic browsing positively affects consumers' urge to buy impulsively in m-commerce on Singles Day shopping festival.

Utilitarian consumers are highly concerned about finding content which suited their purposes (Faqih & Jaradat, 2015) in a thoughtful cognitive process. However, impulse buying behaviour is a compelling, hedonically, and sudden complex behaviour and rapid impulse buying process preclude deliberate and thoughtful consideration of alternative (Beatty & Ferrell, 1998). When buying on impulse, consumers made an unreflective purchase. Sharma et al. (2010) also proposed that low cognitive control would induce impulse buying, and such purchase might occur without regarding to other consequences. Therefore, we infer that utilitarian browsing has no direct effect on urge to buy impulsively.

Personal shopping valued on behalf of the overall value of shopping experience (Babin, Darden, & Griffin, 1994). Hedonic value reflected the immediate gratification provided by a shopping experience (Babin, Chebat, & Michon, 2004). Specifically, hedonic consumers inclined to seek play, fantasy, and experiences (Voss, Spangenberg, & Grohmann, 2003). Utilitarian shopping value depended on the accomplishment of the particularly consumption need which stimulated the shopping trip (Babin, Darden, & Griffin, 1994). Based on the existing literature we expect that utilitarian consumers may engage in browsing to obtain information or products that suit their expectation and thereby gain hedonic value from the shopping experience. Babin et al. (2004) supported our remarks by positing that these two values tended to complete each other rather than oppose each other. In their work, they demonstrated the positive relationship between utilitarian value and hedonic value.

Therefore, we propose the following hypothesis:

Hypothesis 2 (H2). Utilitarian browsing has an indirect influence on the urge to buy impulsively via affecting hedonic browsing in m-commerce on Singles Day shopping festival.

3.2. Interpersonal influence and browsing (hedonic and utilitarian browsing)

According to existing literature, families and friends were likely to affect consumers' purchase behaviour in collectivist countries (e.g., Singapore, China) (Lee & Kacen, 2008). Consumers in China, a country with obvious characteristics of collectivism, tended to be affected by the views of the people around them (Yoon, Suk, Lee, & Park, 2011), especially in the context of the popular and unique Chinese shopping festival. Before the shopping day, consumers especially youngsters tended to communicate with friends about their favourite product and its discount which may induce hedonic value. Previous literature supported our views. For example, Arnold and Reynolds (2003) proposed that shoppers pursuing hedonic shopping values might seek advice and guidance from others while shopping. Olsen and Skallerud (2011) illustrated that personal interactions were likely to contribute to the provision of hedonic shopping values.

Consumers with utilitarian values tended to realize their initial objectives (Faqih & Jaradat, 2015). In order to realize their purchase goal, they have to find more and high-quality information to make the purchase decision (To, Liao, & Lin, 2007). Previous studies proposed that consumers tended to find the product information which was provided by other consumers (Ismagilova, Dwivedi, & Slade, 2019; Cheong & Morrison, 2008; Ismagilova, Slade, Rana, & Dwivedi, 2019), because it could reduce the risk induced by information asymmetry (Goldsmith & Horowitz, 2006) and help consumers to gain utilitarian value. In addition, previous study revealed that product information was considered as one of the major utilitarian benefits for utilitarian value in online shopping (Chiu, Wang, Fang, & Huang, 2014).

Therefore, we propose the following hypotheses:

Hypothesis 3 (H3). Interpersonal influence positively affects consumers' hedonic browsing in m-commerce on Singles Day shopping festival.

Hypothesis 4 (H4). Interpersonal influence positively affects consumers' utilitarian browsing in m-commerce on Singles Day shopping festival.

3.3. Visual appeal and browsing (hedonic and utilitarian browsing)

Parboteeah et al. (2009) proposed that "visual appeal relates to the exhibition of fonts and other visual elements such as graphics, acts to enhance the overall presentation of a web". Prior literature illustrated that website interface acted as the consumers' first impression of a website and had an influence on users' evaluation of a website (Tractinsky, Katz, & Ikar, 2000). Therefore, we expect that visual appeal will induce consumers to gain hedonic value or utilitarian value via browsing the website. Chang et al. (2014) supported our statement by proposing that aesthetic appeal reflected the degree of pleasure, satisfaction, and entertainment which consumers obtained from the website. In addition, increased bandwidths helped to offer the use of high-definition photos and videos in e-store design (Floh & Madlberger, 2013). Such high-quality photos and videos not only helped websites appear attractive but also assisted consumers in browsing, evaluating, comparing, and selecting products.

Therefore, we propose the following hypotheses:

Hypothesis 5 (H5). Visual appeal positively affects consumers' hedonic browsing in m-commerce on Singles Day shopping festival.

Hypothesis 6 (H6). Visual appeal positively affects consumers' utilitarian browsing in m-commerce on Singles Day shopping festival.

3.4 Portability and browsing (hedonic and utilitarian browsing)

The key features that users appreciated in m-commerce were the interface design and portability of handheld devices (Okazaki & Mendez, 2013). As one of the most important intrinsic factors of mobile devices, portability had been pointed out to influence handheld device use and satisfaction (Kuziemsky, Laul, & Leung, 2005). Ghose and Han (2011) described portability by stating that “users can access the internet via mobile devices anytime and anywhere, subject to signal reception”. This description indicated that portability allowed an extensive reach beyond location and temporal constraints.

As a result, consumers could browse websites via their mobile devices anytime and anywhere, which could significantly increase consumers’ browsing time. The longer the time spent on browsing, the more contact with various stimuli, the more likely to induce user’s hedonic and utilitarian motivation. Due to the technology of mobile device, users could connect with sellers anytime and anywhere, which increases the time of chatting connection in m-commerce. Kim and Hwang (2012) believed that hedonic value is related with chatting in mobile internet. Therefore, we infer that the increased time of chatting between consumers and sellers will induce hedonic value. In addition, as portability breaks time and space constraints, it can help consumers find information or purchase the products they want immediately (Overby & Lee, 2006) so as to gain utilitarian values (Venkatesh & Brown, 2001).

Therefore, we propose the following hypotheses:

Hypothesis 7 (H7). Portability positively affects consumers’ hedonic browsing in m-commerce on Singles Day shopping festival.

Hypothesis 8 (H8). Portability positively affects consumers’ utilitarian browsing in m-commerce on Singles Day shopping festival.

4. Research methodology

4.1. Data collection

To understand and evaluate the relationships among the key constructs, we adopted a survey approach in verifying the proposed research model. We selected mobile Taobao to collect data, one of the largest mobile shopping platforms in China. On the one hand, the mobile Taobao has become the most influential mobile shopping app in China. On the other hand, Alibaba is the first and most representative company to implement the Singles Day Shopping Festival. Accordingly, mobile Taobao appeared as a suitable context for examining the research model of this study.

We collected data via an online questionnaire. Our target sample comprised consumers who made purchases through the mobile Taobao during the Singles Day Shopping Festival. Taobao users included students and employees, who were all included in our sample. We created the online questionnaire on Wenjuanxing, which was an online survey platform in China (www.wjx.cn). We invited participants through several online channels, such as placing a link to the online questionnaire in various social network sites (e.g., Weibo) and sending an invited message with a link to the questionnaire in Internet instant message tools (e.g., WeChat, QQ). Apart from these participants, we adopted snowballing process to collect more respondents. Riley et al. (2000) illustrated that this sampling method would help to create a sample in which all respondents shared an experience. In addition, to ensure that each respondent only commit one response, we carefully selected each participant’s demographic information and internet protocol (IP) address. In total, 252 valid responses were obtained for the final data analysis. Table 1 shows the demographic profile of the respondents.

The questionnaire we used was comprised of three sections, namely, consumers’ basic shopping information, personal mobile shopping details, and situational questions in the context of the Singles Day Shopping Festival. The survey began with questions about consumers’ mobile shopping behavior during the Singles Day Shopping Festival (e.g. frequency of Taobao use; reasons for using Taobao during Singles Day Shopping Festival on November 11, 2016). In the second section, we measured personal mobile shopping details on a 7-point Likert scale (1 = “strongly disagree” to 7 = “strongly agree”). Appendix A shows the details of the construct measurement.

4.2. Measures

This research adopted all the questionnaire items from previous studies, with appropriate modifications to fit the research context. Portability was measured using four items adopted from Okazaki and Mendez (2013). Browsing which contained utilitarian browsing and hedonic browsing was adopted from the measurement developed by Park et al. (2012). They contained five and four items, respectively. Visual appeal was measured using three items adopted from Parboteeah et al. (2009). Interpersonal influence was measured by using four items. This measure was adopted from Pedersen (2005), which was an extension of the measures used by Taylor and Todd (1995). Urge to buy impulsively was adopted from Parboteeah et al. (2009), using three items.

This article conducted the survey in China; thus, we adopted the translation-back-translation method to ensure the accuracy of the Chinese questionnaire and its consistency with the original English measurement instrument. We pretested the initial Chinese questionnaire through distributing it among 20 junior and senior re- searchers.

5. Data analysis and results

Due to the measurement sample and the predictive nature of this study, we selected partial least squares (PLS) estimation to evaluate the measurement and structural models. Compared with other analysis tools, PLS did not need normal distribution (Chin, 1998), and it was more suitable for the study of theoretical development (Hair, Ringle, & Sarstedt, 2011). Therefore, we adopted Smart PLS 3 to conduct the PLS estimation.

Table 1
Demographics of Respondents.

Demographics	Frequency	Percentage (%)
Gender		
Male	80	31.75%
Female	172	68.25%
Age range		
Below 25	141	60.78%
25–29	61	26.29%
30–39	24	10.34%
Above 40	6	2.59%
Educational level		
High school or below	11	4.37%
Junior college	24	9.52%
University	105	41.67%
Master's degree or higher	112	44.44%
Personal income in RMB (monthly)		
Below 2000	125	49.60%
2001–5000	63	25%
5001–8000	45	17.86%
8001–10,000	9	3.57%
Above 10,000	10	3.97%

5.1. Participant characteristics

With the 439 responses received, we obtained 252 usable responses. We had to drop 187 participants during the data selection process because some of them did not engage in any shopping activity and some did not shop via their mobile devices. Among the 252 participants, 80 (31.75%) were male, and 172 (68.25%) were female. More than half of the participants aged 25 years or younger (60.78%). These percentages were approximate to the data collected by ebrun.com in November 2016¹⁰. Consumers made purchases during the Singles Day Shopping Festival on November 11 primarily because of the demand (82.29%). The second reason was that they were tempted by the discounts and raffle coupons (66.32%).

5.2. Measurement model

In the evaluation of the measurement model, we first checked for construct validity. The point of the measurement model aimed to ensure the appropriate use of psychological instruments, including reliability and discriminant validity. Smart PLS examined the construct loading. As shown in Table 2, all values were well above the benchmark value of 0.7. This outcome sufficiently demonstrated that the constructs showed good agreement (Hair, Ringle, & Sarstedt, 2011). We also used composite reliability of constructs and average variance extracted (AVE) to test convergent validity. As Table 3 shown, the AVE scores ranged from 0.68 to 0.92 and were thus above the benchmark value of 0.5. Composite reliability ranged from 0.91 to 0.97, thus fulfilling the recommended benchmark of 0.7. Discriminant validity illustrated the extent to which items differed from one another (Campbell & Fiske, 1959). As shown in Table 4, the square roots of the AVE for all the constructs were higher than the correlations between the different constructs (Fornell & Larcker, 1981). The Fornell-Larcker ratio of correlations criterion, prior used, was less reliable than the hetero trait mono trait (HTMT) criterion which cannot detect a lack of discriminant validity and assess the discriminant validity (Henseler, Ringle, & Sarstedt, 2015). The absolute HTMT_{0.85} criterion used denoted that discriminant validity was not an issue in this research (the highest degree of correlation is: 0.788) (Maier, Laumer, Weinert, & Weitzel, 2015). All the constructs showed good reliability and the validity of the constructs were confirmed.

Table 2
Item Loadings and Cross Loadings

Constructs	Items	PB	VA	II	HB	UB	UBI
Portability (PB)	PB1	0.891	0.306	0.378	0.167	0.523	0.201
	PB2	0.935	0.278	0.358	0.222	0.561	0.260
	PB3	0.950	0.347	0.394	0.237	0.593	0.253
Visual Appeal (VA)	VA1	0.293	0.959	0.493	0.507	0.410	0.415
	VA2	0.339	0.974	0.515	0.517	0.434	0.403
	VA3	0.335	0.950	0.457	0.486	0.450	0.387
Interpersonal Influence (II)	II1	0.402	0.384	0.814	0.343	0.339	0.421
	II2	0.342	0.407	0.907	0.482	0.364	0.490
	II3	0.308	0.460	0.907	0.474	0.339	0.426
	II4	0.367	0.505	0.833	0.420	0.415	0.412
Hedonic Browsing (HB)	HB1	0.207	0.525	0.457	0.877	0.387	0.570
	HB2	0.246	0.475	0.416	0.920	0.418	0.645
	HB3	0.210	0.410	0.441	0.881	0.385	0.678
	HB4	0.099	0.388	0.407	0.752	0.255	0.566
Utilitarian Browsing (UB)	UB1	0.444	0.387	0.350	0.312	0.815	0.326
	UB2	0.531	0.394	0.407	0.362	0.824	0.353
	UB3	0.504	0.344	0.271	0.274	0.853	0.253
	UB4	0.481	0.335	0.366	0.370	0.838	0.290
	UB5	0.515	0.379	0.325	0.406	0.779	0.351
Urge to Buy (UBI)	UBI1	0.205	0.336	0.452	0.689	0.344	0.940
	UBI2	0.247	0.417	0.487	0.681	0.357	0.955
	UBI3	0.282	0.432	0.493	0.658	0.395	0.937

Table 3
Results of the Confirmatory Factor Analysis.

Constructs	Items	Loading	Composite Reliability	AVE
Portability (PB)	PB1	0.891	0.948	0.858
	PB2	0.935		
	PB3	0.950		
Visual Appeal (VA)	VA1	0.959	0.973	0.924
	VA2	0.974		
	VA3	0.950		
Interpersonal Influence (II)	II1	0.814	0.923	0.750
	II2	0.907		
	II3	0.907		
	II4	0.833		
Hedonic Browsing (HB)	HB1	0.877	0.919	0.739
	HB2	0.920		
	HB3	0.881		
	HB4	0.752		
Utilitarian Browsing (UB)	UB1	0.815	0.912	0.676
	UB2	0.824		
	UB3	0.853		
	UB4	0.838		
	UB5	0.779		
Urge to Buy (UBI)	UBI1	0.940	0.961	0.891
	UBI2	0.955		
	UBI3	0.937		

Note: All factor loadings are significant at the $p < 0.001$ level.

Table 4
Correlations Between Constructs.

Constructs	1	2	3	4	5	6
1. Hedonic browsing	0.860					
2. Interpersonal influence	0.500	0.866				
3. Portability	0.224	0.406	0.926			
4. Urge to buy impulsively	0.717	0.505	0.258	0.944		
5. Utilitarian browsing	0.424	0.421	0.605	0.387	0.822	
6. Visual appeal	0.524	0.508	0.336	0.418	0.449	0.961

5.3 Structural model

After checking the validity, we tested the hypotheses with Smart PLS. Fig. 2 presented the results of the structural model, including the coefficients and their significance, along with the R² values. We selected the bootstrap resampling procedure to test the path significance. As shown in Fig. 2, the results revealed the relationship between each pair of constructs and supported most of the hypotheses. Moreover, most of the path coefficients were statistically significant as hypothesized. The relationship between hedonic browsing and urge to buy impulsively was confirmed (coefficient of 0.674); thus, hypothesis 1 was supported. Furthermore, utilitarian browsing did not significantly influence the urge to buy impulsively (coefficient of 0.101). Consumers who browsed for utilitarian motivations tended to find functional, rational, economic, or extrinsic benefits based on purely economic and rational criteria (Martínez-López, Pla-García, Gázquez-Abad, & Rodríguez Ardura, 2014), rather than to buy impulsively. The effect of interpersonal influence on hedonic browsing was positive and significant (coefficient of 0.299), providing support for hypothesis 3. However, interpersonal influence had no significant effect on utilitarian browsing (coefficient of 0.107), hypothesis 4 was not supported. It may be because consumers with utilitarian motives often have specific shopping aims and were not easily influenced by others. The relationships between visual appeal, hedonic browsing and utilitarian browsing were significant, with the path coefficients been 0.310 and 0.233, respectively. Accordingly, hypotheses 5 and 6 were supported. Hypothesis 8 posited that portability positively influenced utilitarian browsing. The obtained path coefficient (0.483) supported this hypothesis. However, there was no significant relationship between portability and hedonic browsing (coefficient of -0.153), hypothesis 7 was not supported. We did not find significant relationships between the control variables and the urge to buy impulsively.

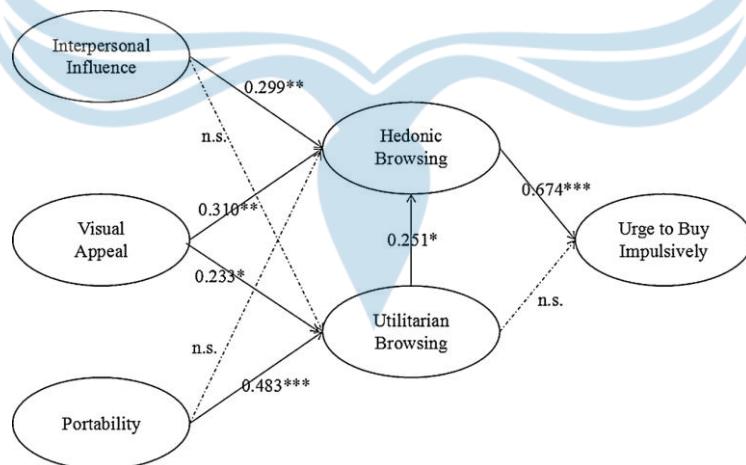


Fig. 2. PLS results for research model.

5.4. Post-hoc analysis

This study used post-hoc analysis to test hypothesis 2. We used a bootstrapping methodology (bootstrap sample size = 5000) which was proposed by Preacher and Hayes (2004) to test the mediating role of hedonic browsing. This study adopted the asymmetric confidence intervals (CIs) to estimate the mediating effect among the indirect relationship. MacKinnon et al. (2004) suggested that the use of asymmetric CIs could estimate the mediating effect

with high accuracy. Preacher and Hayes (2004) proposed that if zero was not contained within the 95% CIs, a significance for the mediating effect would occur. The results of the mediating effect test were presented in Table 5. Utilitarian browsing acted as a significant predictor of hedonic browsing ($C = 0.417$, $p < 0.001$) and hedonic browsing offered a significant predictor of urge to buy impulsively ($C = 0.674$, $P < 0.001$). In addition, the indirect effect between utilitarian browsing and urge to buy impulsively through hedonic browsing was significant because the CIs (0.198, 0.373) did not include zero. Therefore, hedonic browsing had a significant mediating effect on the relationship between utilitarian browsing and urge to buy impulsively hypothesis 2 was supported.

6. Discussion

Rapid development of e-commerce brings new opportunities to both managers and researchers. In particular m-commerce as a popular shopping channel requires urgent attention. The current study building on S-O-R paradigm and motivation theory examines consumers' impulse buying behavior in m-commerce. In particular, this study examines how situation factors (portability, visual appeal and interpersonal influence) influence consumers' impulse buying behavior through affecting their hedonic and utilitarian browsing in m-commerce on Single Days shopping festival. The empirical evidence from 252 valid questionnaires supported most of the hypotheses. This study provides a theoretical lens for enhancing consumer shopping experience via m-commerce.

Table 5
Mediating Effect Analysis with Bootstrapping.

	Effect	SE	95% CI
Direct paths			
Utilitarian browsing → Hedonic browsing	0.417	0.058	(0.304, 0.530)
Utilitarian browsing → Urge to buy	0.102	0.048	(0.007, 0.197)
Hedonic browsing → Urge to buy	0.674	0.048	(0.579, 0.769)
Indirect path			
Utilitarian browsing → Urge to buy	0.281	0.044	
Bias corrected and accelerated 95% CI Hedonic browsing	Lower 0.198		Upper 0.373

6.1. Discussion of key findings

First, according to the results, in comparison to utilitarian browsing, hedonic browsing had a strong and positive effect on consumers' urge to buy impulsively, which was accordance with previous study (Park, Kim, Funches, & Foxx, 2012). This results also validated the finding of Tamilmani et al. (2019) suggested that hedonic motivation played an important role in individuals' behavior intention and should not be excluded without providing any reason. This study further revealed that utilitarian browsing had an indirect influence on the urge to buy impulsively via affecting hedonic browsing behavior, which was consistent with the result of the study of Babin and Babin (2001). In addition, the result confirmed that it was appropriate to adopt hedonic browsing and utilitarian browsing as two motivation values in online context. The results suggested that consumers who browsed to have fun and disregard of the outcomes inclined to get hedonic value would eventually have impulse buying behavior. Whereas utilitarian consumers who were highly concerned in accomplishing the consumption need which suited their expectation had no direct intention in impulse buying behavior.

Second, interpersonal influence in m-commerce on Single Days shopping festival had a significant effect on consumers' hedonic browsing but an insignificant effect on consumers' utilitarian browsing. This finding was consistent with prior study, which suggested that consumers' personal interaction with store employees had a negative effect on their utilitarian perception and a positive effect on their hedonic perception (Olsen & Skallerud, 2011). Apart from the existing conclusions, this study combined offline social interaction and online purchase together which could help other researchers and retailers to better understand consumers' online shopping behavior. The results suggested that consumers gain a sense of pleasure by discussing their purchase plans with others, which would eventually drive them to buy impulsively.

¹⁰ <http://www.ebrun.com/20161118/202688.shtml>

Third, visual appeal had a significant impact on both hedonic browsing and utilitarian browsing. This finding was analogous to the view that proposed by Chang et al. (2014). Different from prior study, this study considered two values (hedonic and utilitarian value) at the same time, because well-organized website could not only make consumers feel entertainment, but also reduce the problem of consumers' distrust caused by information asymmetry and improving consumers' shopping efficiency in m-commerce.

Fourth, portability of mobile device had a significant effect on utilitarian browsing and was similar to the finding proposed by Okazaki and Mendez (2013). The result of this study further provided a comprehensive understanding on the relationship between portability and consumers perceptions (hedonic value and utilitarian value). However, we did not find the significant relationship between portability and hedonic browsing. It might be because hedonic motivation was concerned with entertainment and enjoyment of shopping behavior regardless of the purchase outcome and efficiency (Park, Kim, Funches, & Foxx, 2012).

6.2. Implications for research

This study has several implications to the existing literature. Firstly, the results of this study revealed that portability, visual appeal and interpersonal influence would induce consumers to purchase impulsively in m-commerce on Singles Day shopping festival. Consumers chose to purchase in m-commerce on Singles Day shopping festival mostly due to the portability and visual appeal of mobile device. While prior study suggested that m-commerce would increase impulse buying behavior because of some characteristics of mobile device, little research has examined these via theoretical lens. Moreover, prior literature often portrayed portability as an intrinsic feature of mobile devices and discussed how mobile retailers used this feature to attract consumers (Ghose, Goldfarb, & Han, 2012; Luo, Andrews, Fang, & Phang, 2013), few research viewed portability as an independent situation factor which would induce consumers' impulse buying behavior in m-commerce. In addition, based on the examination of hypothesis 3, we found that sociality (interpersonal influence) was one of the essential factors of Singles Day shopping festival. We could infer that Chinese consumers were likely to share products with others and these behaviours had significant influence on individuals shopping behavior. The relationships among portability, visual appeal, interpersonal influence and impulse buying in m-commerce on Singles Day shopping festival can serve as the initial step of research in this context which could be expanded into a more holistic individual behavior research. This is the most important contribution in our research.

Secondly, from the theoretical standpoint, although motivation theory has been studied for a long time and has been examined in different context (Park, Kim, Funches, & Foxx, 2012; Pöyry, Parvinen, & Malmivaara, 2013), this study provided a particularly perspective on motivation by viewing hedonic browsing and utilitarian browsing as different motivation values for consumers acquiring via browsing behavior on online context. We provided both theoretical and empirical supports for these notions. It is more appropriate to adopt hedonic browsing and utilitarian browsing to examine consumers' motivation in online context due to its specific characteristics. From this point of view, this study developed the motivation theory in online context.

Thirdly, with the success of Singles Day shopping festival in Taobao in 2009, many companies joined in this shopping festival to gain competitive edge. However, few studies have explored this phenomenon until recent days. This study examined situation factors and reaction factors together to verify which factors will induce individuals' impulse buying behaviour in m-commerce in the context of Chinese unique shopping festival (Singles Day shopping festival).

6.3. Implication for practice

From a practical perspective, this study might help e-commerce companies to target their marketing strategies in mobile context, especially on Singles Day Shopping Festival. According to the results, there are several situation factors can be taken to enhance consumers' value in m-commerce. For example, visual appeal and interpersonal influence, all of which were regarded as the main drivers of consumers hedonic value, had significant effect on consumers' impulse buying behavior. Based on above, m-commerce retailers may need to design a more attractive interface to encourage consumers to browse and buy. In addition, m-commerce retailers could set up a pre-holiday shopping spree and offer rewards to the consumers who shared purchase information with others from their mobile shopping app, which could encourage consumers to share their shopping information with their friends to increase the effect of interpersonal influence.

The results also revealed that portability had a significant impact on improving consumers' utilitarian values and then prompting their hedonic values. In order to improve the portability of the mobile device, firstly, mobile device manufacturers could try to produce lighter mobile device and design suitable screen size of mobile device, which helped users to search things more comfortably. Second, these companies should cooperate with mobile network operators to produce high-speed mobile network to make the phone portable and easy to navigate anytime and anywhere. In addition, portability means users could do things via mobile device without the limitation of time and space. Except for buying behavior, mobile device should add as many features as possible to help users do whatever they want to do, such as pay for energy bills.

6.4 Limitation and future research

Recognizing that all studies have limitations that impact the findings, we presented here the major limitations of this study. First, we adopted cross-section data to verify the relationship in the research model instead of using an experimental approach or longitudinal studies which could provide powerful inference about causality (Dillon & Goldstein, 1984). Survey method had several limitations including whether the participants' responses were truthful or whether there was a reply bias presented in participants' answers. Moreover, survey method has self-selected nature, the questionnaire participants in this study maybe an active user in Taobao. However, because of the limited resources and time, many researchers adopt cross-sectional research as an exploration tool to examine the relationship of the research model. Due to the limitation of survey method, actual behavior cannot be accurately measured. Future research could adopt experiments or longitudinal approach to examine consumers' buying behavior.

Second, we only collected data during the Singles Day Shopping Festival on mobile Taobao. Thus, we could not generalize the findings to other specific shopping Festival (e.g., Jingdong 618, Double 12 on-line shopping festival). And we could not compare the differences between the data during the shopping festival and out of the shopping festival. Future research could include samples from two different times to explore the possible differences in terms of buying behavior and could test it in different situation context.

Third, this study only focused on three situation factors which were adopted from different aspects. Many factors remained worthy of consideration and study (e.g., promotion, time pressure). Future research could consider these factors and examine their effects on hedonic browsing and utilitarian browsing. Researchers could cluster these situation factors into the different motivations (hedonic motivations and utilitarian motivations) so the extended results could be provided for companies to gain competitive advantages.

7. Conclusion

This study showed how the situation factors induced consumers' impulse buying behavior in m-commerce on Singles Day Shopping Festival. Based on S-O-R paradigm and motivation theory, this study provided a theoretical foundation for understanding situation factors that influenced consumers' motivation values and eventually induced the urge to buy impulsively. It is necessary for future research to examine other situation factors that could induce motivation values in m-commerce. Nevertheless, this study revealed interesting findings in the subject of m-commerce on Singles Day Shopping Festival.

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Appendix A

Measuring items for research model.

Interpersonal influence (Modified from Pedersen, 2005)	
II1	Almost all of my friends use mobile commerce services.
II2	Almost all of my colleagues think using mobile commerce services is a good idea.
II3	My friends/colleagues think that we should all use mobile commerce services.
II4	Some of my friends/colleagues recommended I should try out mobile commerce services.
Visual appeal (Modified from Parboteeah et al., 2009)	
VA1	The mobile Taobao is visually pleasing.
VA2	The mobile Taobao displays visually pleasing design
VA3	The mobile Taobao is visually appealing.
Portability (Modified from Okazaki & Mendez, 2013)	
PB1	These services are practical because I can use them without difficulty wherever I am.
PB2	Using these services outside my home or workplace creates no problems for me.
PB3	I find it convenient to use these services because they don't make me dependent on any fixed installation.
Utilitarian browsing and hedonic browsing (Modified from Park et al., 2012)	
UB1	I browse to buy better items in price or quality.
UB2	I browse shopping websites to gather information about products.
UB3	I look around shopping websites to comparison shop.
UB4	I browse shopping websites to get additional value as much as possible.
UB5	I browse for efficient online shopping.
HB1	While web browsing, I am able to forget my problems, and I feel relaxed.
HB2	I enjoy web browsing enough to forget a time out.
HB3	I look around at items on the internet just for fun.
HB4	During web browsing I am very excited; it is like playing.
Urge to buy impulsively (Modified from Parboteeah et al., 2009)	
UBI1	As I browsed this website, I had the urge to purchase items other than or in addition to my specific shopping goal.
UBI2	Browsing this website, I had a desire to buy items that did not pertain to my specific shopping goal.
UBI3	While browsing this website, I had the inclination to purchase items outside my specific shopping goal.

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