



## Measuring customer aggression: Scale development and validation

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### ABSTRACT

Despite increasing levels of customer aggression being identified within the retail and services sector, no comprehensive tool has been developed to measure such behaviour, thus limiting empirical examinations of this phenomenon. Five studies were undertaken, comprising a student survey, a Delphi-style expert panel review and three retail worker surveys. The results identify a four-factor, 19-item Customer Aggression scale. The nomological validity of the scale was established by demonstrating the impact of customer aggression on employee emotional exhaustion, job stress, organisational deviance and intention to leave. This research contributes a parsimonious, reliable and valid scale to measure such behaviours, facilitating further scientific inquiry.

### 1. Introduction

Globally, the speed of change associated with modern retail (Grewal et al., 2017) and the growth of retail technologies (Adapa et al., 2020; Grewal et al., 2020) are creating higher levels of stress and frustration within the service experience (Chen et al., 2019; Yang and Hu, 2021). It is not uncommon to witness a customer violently throwing an item at an employee when it fails to scan (reactive-expressive aggression), or yelling to attain a discount or upgrade (proactive-expressive aggression). While such examples are clearly visible, other encounters with aggressive customers may be more subtle or implied. For example, triggered by a negative situational event, such as an unavailable menu item, a customer may react in a less noticeable manner, like staring in a hostile manner at an employee or using their height to intimidate (reactive-inexpressive aggression). Others may proactively employ passive aggressive techniques, i.e., posting false '1-star' Google reviews, in an attempt to garner benefits or discounts (proactive-inexpressive aggression). Such examples appear to indicate the multidimensionality of 'customer aggression', which might span a range of expressive and inexpressive, reactive and proactive behaviours. However, none of the existing measures of customer aggression cover both the expressiveness and proactiveness aspects, and there is a lack of empirical validations.

Customer aggression continues to be widely reported internationally. A recent survey of 1160 retail and fast-food workers found 56% had experienced an increase in customer abuse (Vromen et al., 2021). An Australian retail workers' union surveyed 1000 members, finding 80%

had experienced customer abuse in the previous 12 months (Shop, Distributive and Allied Employees' Association, 2020). A United States survey of nearly 5000 frontline service workers found 3069 were abused, 1326 were threatened and 196 were physically assaulted – more than double the rate of incidents compared to 2019 (Lillis, 2020). Similarly, a recent British survey found 65% of respondents have seen threats toward service staff increase, leading to 1.26 million reported incidents of verbal abuse (Wiggins, 2021). Despite increasing levels of customer aggression being reported within the retail and services sector, to date, no comprehensive tool has been developed to measure the dimensionality of such behaviour, thus limiting empirical examinations of this phenomenon, which may inform ways to mitigate such behaviour. As such, a deeper, more comprehensive examination of customer aggression is vital.

Earlier attempts to understand customer aggression (See Table 1 below) have often focused on simply one element of aggression (e.g., verbal abuse) (Cho et al., 2020; Wang et al., 2011; Pandey et al., 2021) or within single contexts, such as call centres (Li and Zhou, 2013). For example, Grandey et al. (2004) measured only verbal aggression, using a single item, 'spoke aggressively toward you'. Other attempts (see Huang and Dootson, 2022) have relied on adapted supervisory/management aggression scales, such as Tepper's (2000) Abusive Supervision scale, which has been modified and applied to capture aggressive and abusive customer behaviour (also see Ben-Zur and Yagil, 2005; Karatepe, 2011; Gaucher and Chebat, 2019). However, the power imbalance and relationships between managers versus customers and frontline retail

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workers vary. The disconnected, random and anonymous interactions between customers and frontline service workers differ from the long-term, relational exchanges retail and service workers would have with managers. Further, items that measure ‘abusive supervision’ (*Doesn't give me credit for jobs requiring a lot of effort*”, *Breaks promises he/she makes*” and *“Lies to me”*), do not capture the customer/frontline

worker interactions.

Other attempts to measure customer aggression have derived from qualitative, semi-structured interviews. [Dormann and Zapf \(2004\)](#) conducted interviews with employees in shoe stores and travel agencies and with flight attendants, developing themes relating only to ‘ambiguous’ customer expectations and ‘verbal aggression’. This work in itself

**Table 1**  
Earlier measures of customer aggression.

Author/s	Measure	Context/Sample	Method	Limitations
<a href="#">Cho et al. (2020)</a> .	Verbal Aggression	Nursing	Single online survey, n = 1161.	Single study, measure only the ‘frequency’ of verbal abuse by patients, families, or physicians directed toward nurses. Constrained to single context – nursing.
<a href="#">Li and Zhou (2013)</a> .	Verbal Aggression	Chinese Call Centre Employees	Single survey, n = 1112.	A 13 item Verbal Aggression scale developed, however the standard <a href="#">Churchill (1979)</a> process of scale development not followed. Constrained to single context – Chinese call centres and only related to ‘verbal’ elements of aggression.
<a href="#">Grandey et al. (2004)</a> .	Verbal Aggression	Call Center Employees	Interviews, n = 12 Single survey, n = 198.	Employed a single item, ‘spoke aggressively toward you’ to measure verbal aggression and its impact on absences (time lost). Constrained to single context – call centres and single item measure of verbal aggression.
<a href="#">Tepper (2000)</a> .	Abusive Supervision	General (non-defined) US-based Employees	Two paper based surveys, n = 712 and n = 362.	Developed a 13 item measure of sustained ‘supervisory’ hostile verbal and non-verbal behaviours directed at employees. <a href="#">Churchill (1979)</a> process of scale development not followed. Measures adapted from earlier supervisory and domestic abuse measures. Accordingly, not relevant in the retail/services context, or the customer/employee relationship. Items not derived from retail or services theories or informed by practice.
<a href="#">Gaucher and Chebat (2019)</a> .	Interactional Justice	US-based retail employees	Single M-Turk survey, n = 415.	Measures only ‘Interactional Justice’ and ‘uncivil behaviour’ (politeness, dignity, and respect), as a proxy for ‘aggression’, but does not measure ‘aggression’ specifically.
<a href="#">Dormann and Zapf (2004)</a> .	Customer-Related Social Stressors	US-based flight attendants, travel agents and footwear sales associates.	Single survey, n = 591.	Developed a four-factor measure of Customer-Related Social Stressors – including (1) ‘verbal aggression’, i.e., ‘shout’, ‘attack us verbally’, ‘complain’; and ‘argue’; (2) ‘incivility’, i.e., ‘interrupt’, ‘no sense of humour’ and ‘unpleasant’. Fails to acknowledge the full range of potential aggressive behaviour (pro-active/reactive). Does not measure ‘aggression’ specifically.
<a href="#">Chaouali et al. (2022)</a> .	Customer Misbehaviour	Restaurant diners.	Single mall intercept survey, n = 263.	Measured the relationship between ‘dark triad personality traits’ and ‘customer misbehaviour’. Misbehaviour measured with a single, open-ended item, “ <i>Did you behave in a way that may be judged by others to be inappropriate</i> ”. Fails to acknowledge the full range of potential aggressive behaviour (pro-active/reactive). Does not measure ‘aggression’ specifically.
<a href="#">Gong et al. (2022)</a> .	Customer Misbehaviour	Restaurant diners and hotel guests.	Survey 1, n = 200, Survey 2, n = 200, Survey 3, n = 300.	Measured customers’ intention to engage in indirect misbehaviour – including overconsumption, damaging assets, throwing herbage. However, aggression not measured.
<a href="#">Wang et al. (2011)</a> .	Customers Misbehaviour	Chinese Call Centre Employees.	Single paper based survey, n = 131.	Examined daily customer mistreatment of call centre workers and workers’ intention to ‘sabotage’ or engage in counter productive work behaviour as a response. Constrained to single context – Chinese call centres. Fails to acknowledge the full range of potential aggressive behaviour (pro-active/reactive). Does not measure ‘aggression’ specifically.
<a href="#">Yamasaki and Nishida (2009)</a> .	Proactive-Reactive Aggression	Primary school children, grades 4 to 6.	Single survey, n = 1581.	Developed a three-factor measure of aggressive behaviour in young children. Accordingly, not relevant in the retail/services context or the customer/employee relationship. Items not derived from retail or services theories or informed by practice.
<a href="#">Henry et al. (2004)</a> .	Classroom Aggression and Violence	US-based, Pre-Kindergarten through 12th grade students.	Pilot survey, n = 236 Single survey, n = 3304.	Study adopted the four-item child aggression scale from <a href="#">Dahlberg et al. (1998)</a> , which measures youth violence. Not relevant in the retail/services context or the customer/employee relationship. Items not derived from retail or services theories or informed by practice.
<a href="#">Ladd and Profilet (1996)</a> .	Children’s Aggressive, Withdrawn, and Prosocial Behaviors	US-based 5-6 year-old children.	Single survey, n = 206.	Aggression measured with a 7-item ‘Aggressive with Peers’. Accordingly, not relevant in the customer/employee context. Items not derived from retail or services theories or informed by practice.
<a href="#">Ben-Zur and Yagil (2005)</a> .	Customer Aggression	Doctors, nurses, clerical, teachers and sales associates.	Single online survey, n = 228.	Employed an adapted 13 items adapted from the Abusive Supervision Questionnaire ( <a href="#">Tepper, 2000</a> ). Specific items used not relevant in the retail/services context, or the customer/employee relationship. Items do not measure ‘customer aggression’, i.e., “ <i>Doesn't give me credit for jobs requiring a lot of effort</i> ” and “ <i>Breaks promises he/she makes</i> ” and “ <i>Lies to me</i> ”.
<a href="#">Karatepe (2011)</a> .	Customer Aggression	Arab frontline employees at international five-star Dubai hotels.	Single online survey, n = 135.	Culturally and contextually constrained. Employed an adapted 13 items adapted from the Abusive Supervision Questionnaire ( <a href="#">Tepper, 2000</a> ). (See above limitations.)
<a href="#">Pandey et al. (2021)</a> .	Customer Aggression	Indian-based retail workers.	Interviews, n = 150 Single survey, n = 437.	Developed a 6-item, measure of Customer Aggression, however, limited only to ‘Verbal Aggression’ – harsh words, yelling, grumbling, and negative remarks.

suggests the complex multidimensionality of customer aggression, yet this line of enquiry was not followed. Instead, [Dormann and Zapf \(2004\)](#) develop a four-factor measure of 'Customer-Related Social Stressors', which include (1) 'verbal aggression', i.e., 'shout', 'attack us verbally', 'complain'; and 'argue'; and (2) 'incivility', i.e., 'interrupt', 'no sense of humour' and 'unpleasant'. The work fails to acknowledge the full range of potential proactive/reactive aggressive behaviours at play in a retail and services setting. At a much deeper level, psychological measures of aggression tend to be housed in early childhood and educational literature and not derived from retail or services theories or informed by practice ([Yamasaki and Nishida, 2009](#); [Henry et al., 2004](#); [Ladd and Profflet, 1996](#)). Finally, aggression has often been grouped with misbehaviour or incivility ([Chaouali et al., 2022](#); [Gong et al., 2022](#)). [Harris and Daunt \(2011\)](#) define misbehaviour as including theft, vandalism and other dishonest actions, while [Malvini Redden \(2013\)](#) suggests customer misbehaviour may also include aggression but does not measure aggression specifically. In contrast to aggression, incivility has been defined as low-intensity deviant behaviour that may include rudeness, being discourteous or disrespectful ([Fellessen and Salomonson, 2020](#)), whereas aggression includes displays of hostile verbal and non-verbal behaviours as well as physical contact ([Yamasaki and Nishida, 2009](#)). In all, the literature suggests that customer aggression is potentially a multi-dimensional construct, which sits within a broader suite of abnormal, deviant customer behaviours ([Fisk et al., 2010](#)). The aim of the current work is to examine the potential multidimensionality of customer aggression by way of empirically developing a psychometric scale to clearly identify and facilitate the measurement of customer aggression in a retail and services context.

As addressed above, this current research overcomes the limitations of earlier attempts by contributing five studies to develop a four-dimensional Customer Aggression scale, which may serve to more accurately measure the range of customer aggressive behaviours experienced by frontline employees. Once measured, such a tool may guide retail and service sector managers toward prevention and mitigation strategies. Study 1 generates an initial pool of items through a review of extant literature and the results of an open-ended survey conducted with students currently employed in frontline service roles. Study 2 confirms face and content validity through a two-stage expert review process. Study 3 identifies the scale's underlying structure through exploratory factor analysis (EFA), which resulted in a parsimonious set of items loading across four dimensions. The four-factor structure of the scale was confirmed via confirmatory factor analysis (CFA). This stage also demonstrates the scale's reliability and discriminant validity. Study 4 demonstrates the criterion validity of the scale by testing the association of the developed customer aggression dimensions with related constructs, such as customer incivility, customer misbehaviour and workplace violence. Finally, Study 5 demonstrates the nomological validity of the scale by demonstrating the scales' dimensions behave as they are hypothesised to do, relevant to logical constructs. In this case, it is predicted that sustained incidents of customer aggression will increase employee emotional exhaustion ([Mulki et al., 2006](#)), and such emotional exhaustion will lead to greater levels of job stress ([Parker and DeCotiis, 1983](#)), organisational deviance and intentions to leave ([Mortimer et al., 2021](#); [Raza et al., 2021](#); [Mulki et al., 2006](#)).

## 2. Theoretical framework

As noted above, previous studies and measurements of aggression have evolved from early childhood and educational psychology literature; that is, understanding aggressive behaviour within a classroom environment ([Yamasaki and Nishida, 2009](#); [Ladd and Profflet, 1996](#)). While such literature provides a strong theoretical base, it fails to address several important socially constructed variances germane to the retail service environment: the notion of customer sovereignty ([Korczyński and Ott, 2004](#); [McMullen, 2017](#)), the low-status shield held by frontline service employees ([Hochschild, 1983](#); [Kolb, 2007](#)) and the

disconnected interactions between service employees and customers ([Guttek, 1995](#); [Korczyński and Evans, 2013](#)). The idea that the 'customer is always right' (customer sovereignty) ([Bishop and Hoel, 2008](#)) is often used to explain instances of customer aggression and abuse. [Korczyński and Ott \(2004\)](#) discuss sovereignty as relating to perceived relational superiority. It has been theorised that customer aggression results when 'customer enchantment' turns to 'disillusionment' ([Korczyński, 2002](#)). For example, a customer becomes aggressive when they have declined a request (upgrade, refund) that they believe they are entitled to (because the customer is always right).

The perception of low-level, low-paid, low-status and low-skilled work associated with retail service occupations further conflates aggressive behaviour ([Hampson and Junor, 2005](#)). Such retail frontline service roles are generally dominated by individuals with gender, ethnic and social class characteristics considered to be low-status ([Vromen et al., 2021](#)). [Leidner \(1993, p. 132\)](#) argues customers are more likely to demonstrate aggressive behaviour toward retail workers who lack a 'status shield', such as young female students or migrant workers, rather than toward supervisors. Finally, the service interaction continuum may also elevate customer aggression. Consider the isolated, anonymous interaction with a young checkout operator who has packed your groceries poorly versus the long-term relational exchange you have with a hairdresser or pharmacy assistant; it has been suggested customer aggression is less likely to occur when interactions are designed as relationships but more likely to occur when the service exchanges are simply isolated encounters ([Guttek, 1995](#)).

Taking into consideration the ideas of customer sovereignty, low-status shield and isolated service encounters, this current study employs displaced aggression theory to explain and frame customer aggression ([Dollard et al., 1939](#)). [Marcus-Newhall et al., \(2000\)](#) meta-analysis of experimental literature confirms that displaced aggression can provide a robust explanation of aggressive behaviours in a retail services context. Their research indicates that angry individuals, who were unable to retaliate against the provocation, are more likely to respond aggressively toward an innocent individual – often referred to as the 'kicking the (barking) dog effect' ([Bushman et al., 2005](#)). In context, displaced aggression theory explains that when a customer feels unfairly treated (customer sovereignty disillusionment), they may behave aggressively toward an anonymous (isolated service interaction) retail worker (low-status shield) because the source of the provocation (retailer's refund policy) is too powerful, procedurally or legally binding, or may exert retaliation (resulting in a fine or ban from the store).

## 3. Dimensionality of customer aggression

A key contribution of this current research is the identification of the dimensionality of customer aggression in the retail and services sector. While the idea of frontline worker-directed aggression often conjures up images of physical or verbal altercations, these examples only illustrate extreme instances. This extreme form of aggression connects with the literature pertaining to 'reactive-expressive' aggression (REA), which includes reactions of defence and retaliation ([Dodg, 1991](#)). Such behaviours are driven by negative emotions such as anger or frustration ([Miller and Lynam, 2006](#)). REA is characterised by physical behaviours, including pushing or throwing objects, intended to intimidate or harm frontline service employees ([Yagil, 2008, 2017](#)). These visible emotional reactions are often triggered by unexpected situational events, for example the unavailability of an advertised product or perceptions of poor service. However, some customers may behave aggressively toward a frontline service worker not as a reaction to an unexpected situation but to attain a positive outcome for themselves. Referred to as 'proactive-expressive' aggression (PEA), the literature defines this behaviour as a premeditated, deliberate, self-serving and goal-oriented form of aggression ([Hubbard et al., 2010](#)). For example, yelling, being verbally demeaning, threatening or insulting a frontline service employee to attain a cash refund, exchange, upgrades or benefits.

Workplace supervisory abusive behaviour literature indicates proactive aggression is more commonly ‘verbal’ than ‘physical’, as language, tone and voice are often used surreptitiously and in a premeditated manner to ensure compliance (Keashly et al., 1994; Saunders et al., 2007). Conversely, shoving or pushing tends to be associated with a spontaneous reaction.

While the two examples above illustrate customer aggression as a visible expressive occurrence, other forms of customer aggression exist that may be defined as subtle or implied. The first, ‘reactive-inexpressive’ aggression (RIA), similarly stems from an unexpected situation but results in non-verbal, non-physical but threatening behaviours directed toward an individual (Kawabata et al., 2016). It may take the form of covert hostility (Johnston et al., 1991). For example, staring in an aggressive manner, using one’s height to intimidate or ignoring reasonable requests. The final form of customer aggression is referred to as ‘proactive-inexpressive’ aggression (PIA), which again is a non-verbal, non-physical form of aggression but involves the deliberate act of initiating indirect or covert aggression designed to attain a goal; that is, to cause a disruption, damage the brand or attain financial outcomes. These PIA behaviours may be the result of customer misbehaviour (Malvini Redden, 2013) and include intentional dishonesty (Harris and Daunt, 2011; Han et al., 2016). Acts may include intentionally falsifying complaints or reviews about the employee to attain a benefit (Baker et al., 2012; Chong and Abawajy, 2015). For example, indicating a 1-Star Google review in the hope of attaining a free meal as compensation. Such behaviour has an adverse impact on employees and retail businesses, as it deliberately persuades other customers to accept the false beliefs that are being shared (Talwar et al., 2020). In bringing these four elements of customer aggression together, we present the Customer Aggression Matrix (see Table 2).

4. Methodology

The development of the Customer Aggression scale was informed by accepted scale-development procedures (Churchill, 1979). Five studies were undertaken to attain (1) item generation, (2) item purification, (3) scale dimensionality, (4) scale validation and (5) nomological validity (see Table 3).

4.1. Stage 1: item generation – study 1

To ensure a deeper understanding of the customer aggression

Table 2  
Customer aggression matrix.

Reactive-expressive aggression (REA)	Proactive-expressive aggression (PEA)
A visible emotional reaction triggered by a situational event that results in direct and intentional physical (or verbal) aggression aimed toward an individual. Example: <i>Pushing, shoving, throwing objects, yelling aggressively at a retail employee in response to a negative situation (i.e., product unavailability, refund refusal, perceived overcrowding).</i>	A visible, goal-oriented emotional demonstration that results in direct and intentional aggression aimed toward an individual, designed to encourage compliance or goal attainment. Example: <i>Intentionally demeaning, yelling or swearing aggressively to attain a cash refund, upgrades or benefits.</i>
Reactive-inexpressive aggression (RIA)	Proactive-inexpressive aggression (PIA)
A subtle, implied emotional reaction triggered by a negative situational event that results in direct non-verbal, non-physical, covert hostility aimed toward an individual. Example: <i>Staring in an aggressive manner at a retail employee, entering their personal space, using one’s height or build to intimidate, ignoring reasonable directions or requests.</i>	A subtle, implied goal-oriented emotional demonstration that results in indirect, non-verbal, non-physical and covert hostility designed to encourage compliance or goal attainment. Example: <i>Intentionally falsifying complaints, writing fake reviews or spreading rumours about a retail employee’s performance to attain benefits or positive outcomes.</i>

Table 3  
Customer Aggression scale development process.

Stage	Study	Items
Stage 1 – Item Generation	<b>Study 1:</b> Literature review + open response surveys (n = 211), undergraduate students (currently employed in frontline service roles) over 8 weeks	Initial items: 74
Stage 2 – Scale Purification	<b>Study 2:</b> Face and content validity – two-stage expert review (n = 3; n = 4)	Interim items: 49
Stage 3 – Scale Dimensionality	<b>Study 3:</b> EFA (49 interim items) – survey of frontline retail and service employees (n = 251) CFA – convergent and discriminant validity	Purified items: 20 Model fit attained – four-factor solution
Stage 4 – Scale Validation	<b>Study 4:</b> Survey of frontline retail and service employees (n = 389) to test the extent to which factors are empirically associated with relevant criterion variables.	Criterion validity attained – 1 cross-load item removed
Stage 5 – Nomological Validity	<b>Study 5:</b> Survey of frontline retail and service employees (n = 391) to test the predictive nature of the customer aggression scale	Nomological validity attained Four-dimensional Customer aggression scale established Final items: 19

phenomenon, as presented above, a thorough review of the related literature was undertaken to identify the four dimensions of customer aggression (Table 1). A domain sampling method was used to generate a large pool of initial measurement items (Nunnally and Bernstein, 1994, p. 217). This was achieved through a series of open-response surveys administered over 8 weeks to 211 undergraduate students. The sample comprised 58% females, 41% males and 1% other, who were aged 18–32 years old (M = 21.2 years) and had an employment length of between 18 months and 12 years (M = 3.4 years). Students were screened to ensure they were currently employed in frontline service roles. Students were presented with one instruction: “Please briefly describe a recent negative or unpleasant service experience with a customer.” Responses included experiences such as being yelled or sworn at, being ignored, having items thrown toward them, being ‘stood over’ or having fake poor reviews or negative comments posted on social media. Through a deductive approach, the researchers then analysed the responses in line with the literature and theoretically derived definitions of the ‘customer aggression’ construct, as presented in Table 1. After removing illegible or incomplete responses, an initial pool of 74 items was attained.

4.2. Stage 2: scale purification – study 2

Item reduction was facilitated via a Delphi-style expert review in two stages. Firstly, the initial 74 items were refined by three marketing academics, selected based on their field of research (Netemeyer et al., 2003). Each expert was asked to clarify ambiguous items and allocate these items into the theoretical categories presented above (Table 1). Once agreement was attained, six items were discarded, and the remaining 68 items were classified into four categories: reactive-expressive aggression (REA), proactive-expressive aggression (PEA), reactive-inexpressive aggression (RIA) and proactive-inexpressive aggression (PIA). Secondly, the remaining 68 categorised items were then sent to a further four academic experts from two external universities for further refinement. Herein, the experts were asked to rate each item on how it represented each dimension. Only those items rated as ‘clearly’ or ‘somewhat representative’ by the majority were retained. A total of 49 items remained after this stage of refinement.

4.3. Stage 3: scale dimensionality – study 3

To identify the underlying factor structure and refine the interim

items, data were collected directly from frontline retail and service workers. A commercial research organisation was employed to survey panel participants. Participants were screened to confirm they currently worked within a retail or services frontline role. A survey link containing the 49 randomised items, two integrity-check questions and sample demographic items was forwarded to participants, who indicated their responses for each item on a scale of *strongly disagree/never* (1) to *strongly agree/always* (7). Participants who failed either or both integrity-check items, completed the survey too quickly or responded to items consistently across the entire survey were removed, resulting in a final sample of  $n = 251$ . The sample comprised 55% female, 42% male, 3% undisclosed; 18–24 years 16%, 25–35 years 32%, 36–45 years 35%, 46–55 years 8%, 56–65 years 6%, over 65 years 2%, not disclosed 1%; fulltime 24%, part-time 37%, casual 38%, other 1%; employed within retail 36%, hospitality/food service 32%, tourism 8%, personal services 20%, clerical 4%; earning less than AUD\$30,000 3%, AUD\$30,001–\$50,000 12%, AUD\$50,001–\$70,000 38%, AUD\$70,001–\$90,000 32%, AUD\$90,001–\$110,000 8%, AUD\$110,001–\$130,000 4%, over AUD\$130,000 2%, and 1% not disclosed.

To examine the underlying structure of the Customer Aggression scale, EFA was carried out on the data. The KMO (Kaiser-Meyer-Olkin) results showed that the sample was adequate to conduct the factor analysis. Without any item deduction, the initial EFA resulted in a seven-factor structure which accounted for 73% of the total variance. Several poorly loaded items ( $<0.6$ ) were excluded through an interactive EFA approach (Hair et al., 2006), resulting in a four-factor solution which accounted for 78% of the total variance. All factor loadings were greater than 0.60 (Table 4), with an acceptable range of commonalities from 0.67 to 0.85 (Hair et al., 2006). The item-to-total correlation ranged from 0.49 to 0.82. The Cronbach's alpha values for the combined 20-item scale were very good (0.95), and the individual alpha values for the four factors were also above the threshold level of 0.70 (Hair et al., 2006).

Using AMOS 18, CFA was employed to confirm the four-factor Customer Aggression scale structure approach (Churchill, 1979). CFA models should satisfy a set of the goodness-of-fit indicators, including goodness-of-fit index (GFI), normed fit index (NFI), Tucker-Lewis index (TLI) and incremental fit index (IFI) values to be greater than 0.80, comparative fit index (CFI) to be greater than 0.90, and root mean square error of approximation (RMSEA) should be less than 0.08 (Bagozzi and Yi, 1988). The model had good model fit with  $\chi^2 (162) = 265.240$ ,  $\chi^2/df = 1.637$ ,  $p = 0.000$ , GFI = 0.905, TLI = 0.973, NFI = 0.943, CFI = 0.977, IFI = 0.977 and RMSEA = 0.05. A set of reliability and validity measures for the latent constructs were then assessed and are presented in Table 5. Cronbach's alpha values for all the dimensions were above the cut-off value of 0.70 (ranging from 0.871 to 0.949) (Hair et al., 2006). Factor loadings (greater than 0.70), composite reliability (greater than 0.70), and average variance extracted (AVE; greater than 0.50) were all above the threshold limits. Thus, convergent validity was achieved. Discriminant validity of the scale was also attained as the square root of AVE was greater than the inter-construct correlations (Fornell and Larcker, 1981).

Common method bias (CMB) was examined in two ways. Harman's single-factor test was employed as a post-hoc test, with results indicating the variance extracted by the first factor accounted for only 25.16% of the variance, mitigating CMB (Podsakoff et al., 2003). As Harman's single-factor approach often produces false positives (Fuller et al., 2016), the researchers introduced a marker variable method. This method is superior to Harman's single-factor test and the partial correlation approach (Podsakoff et al., 2012). The marker variable chosen was uncorrelated to the proposed constructs in the current study. As shown in Table 6, there is no significant  $\chi^2$  change between the baseline model and the constrained models or between the restricted models and the constrained/unconstrained models; therefore, CMB was not present.

**Table 4**  
EFA results.

		PEA	PIA	REA	RIA
PEA1	Customers make direct verbal threats to get a refund.	0.700			
PEA2	To 'get what they want', customers yell aggressively.	0.791			
PEA3	To obtain benefits they are not entitled to, customers will raise their voices in a threatening manner.	0.795			
PEA4	Shouting at me is how customers end up 'getting their own way'.	0.726			
PEA5	Customers seek to 'get something for nothing' by using hostile language.	0.778			
PEA6	Customers swear to obtain more favourable outcomes.	0.787			
PEA7	To get financial benefits, customers can be insulting.	0.740			
PIA1	To get their own way, customers will make misrepresentations about the service they receive.		0.701		
PIA2	I know customers post false reviews about their service experience to obtain benefits.		0.814		
PIA3	To attain better service outcomes, customers falsely complain about the way they were served.		0.833		
PIA4	Dishonestly complaining is a way customers get what they want.		0.787		
PIA5	To obtain an advantage, customers put in false complaints about the way they were served.		0.856		
PIA6	To take advantage, customers will proactively post fake comments about the service they received.		0.797		
REA1	When customers believe their problems are not resolved, their reaction is to become physically aggressive.			0.862	
REA2	In response to perceived poor service, customers have reacted aggressively by throwing things.			0.794	
REA3	Customers will become physically hostile when they are not satisfied with the service they receive.			0.866	
REA4	Getting 'physically aggressive' is becoming the norm when complaints aren't handled well.			0.816	
RIA1	Customers simply ignore reasonable requests when they believe something has gone wrong.				0.780
RIA2	My advice is ignored by customers when they believe a service failure has occurred.				0.786
RIA3	Customers just disregard my suggestions when I am trying to serve them.				0.685
	<b>Eigen Value</b>	10.858	2.336	1.39	1.015
	<b>Variance Explained</b>	25.157	24.148	16.822	11.872

Note: PEA - Proactive-Expressive Aggression; PIA - Proactive-Inexpressive Aggression; REA - Reactive-Expressive Aggression; RIA - Reactive-Inexpressive Aggression.

**Table 5**  
CFA results – Study 3.

		Standardised loadings	Cronbach's Alpha	Composite Reliability	Average Variance Explained
<b>Proactive-Expressive Aggression</b>			0.949	0.949	0.728
PEA1	Customers make direct verbal threats to get a refund.	0.825			
PEA2	To 'get what they want', customers yell aggressively.	0.899			
PEA3	To obtain benefits they are not entitled to, customers will raise their voices in a threatening manner.	0.898			
PEA4	Shouting is how customers end up 'getting their own way'.	0.757			
PEA5	Customers seek to 'get something for nothing' by using hostile language.	0.868			
PEA6	Customers swear to obtain more favourable outcomes.	0.884			
PEA7	To get financial benefits, customers can be insulting.	0.831			
<b>Proactive-Inexpressive Aggression</b>			0.940	0.939	0.721
PIA1	To get their own way, customers will make misrepresentations about the service they receive.	0.818			
PIA2	Customers post false reviews about their service experience to obtain benefits.	0.867			
PIA3	To attain better service outcomes, customers falsely complain about the way they were served.	0.886			
PIA4	Dishonestly complaining is a way customers get what they want.	0.838			
PIA5	To obtain an advantage, customers put in false complaints about the way they were served.	0.871			
PIA6	To take advantage, customers will proactively post fake comments about the service they received.	0.811			
<b>Reactive-Expressive Aggression</b>			0.902	0.905	0.706
REA1	When customers believe their problems are not resolved, their reaction is to become physically aggressive.	0.867			
REA2	In response to perceived poor service, customers have reacted aggressively by throwing things.	0.732			
REA3	Customers will become physically hostile when they are not satisfied with the service they receive.	0.927			
REA4	Getting 'physically aggressive' is becoming the norm when complaints aren't handled well.	0.822			
<b>Reactive-Inexpressive Aggression</b>			0.871	0.876	0.703
RIA1	Customers simply ignore reasonable requests when they believe something has gone wrong.	0.886			
RIA2	My advice is ignored by customers when they believe a service failure has occurred.	0.866			
RIA3	Customers just disregard my suggestions when I am trying to serve them.	0.758			
<b>Discriminant Validity</b>					
		PEA	PIA	REA	RIA
Proactive-Expressive Aggression (PEA)		0.853			
Proactive-Inexpressive Aggression (PIA)		0.722	0.849		
Reactive-Expressive Aggression (REA)		0.559	0.379	0.840	
Reactive-Inexpressive Aggression (RIA)		0.738	0.652	0.541	0.838

Note: The diagonal values are the square root of AVE and the half-diagonal values are inter-construct correlations.

**Table 6**  
Marker variable test for CMB – Study 3.

Model	$\chi^2$ (df)	CFI	RMSEA (90% CI)	Comparison Model	Likelihood Ratio test of $\chi^2$ change
CFA with marker variable	347.201 (218)	0.973	0.049 (0.039, 0.058)		
Baseline	349.227 (225)	0.974	0.047 (0.037, 0.056)		
Constrained	348.982 (224)	0.973	0.048 (0.038, 0.057)	vs Baseline	0.245, df = 5, p = 0.999
Unconstrained	339.273 (205)	0.972	0.051 (0.041, 0.061)	vs Constrained	9.709, df = 19, p = 0.960
Restricted 1	348.982 (230)	0.975	0.045 (0.036, 0.055)	vs Constrained	0, df = 6, p = 1.000
Restricted 2	339.281 (211)	0.973	0.049 (0.039, 0.059)	vs Unconstrained	0.008, df = 6, p = 1.000

Note: df - Degree of Freedom; CI – Confidence Interval.

4.4. Stage 4: scale validation – study 4

To evaluate the criterion validity of the Customer Aggression scale, the researchers returned to the literature pertaining to customer 'misbehaviour', 'incivility' and 'workplace violence' to validate the constructs associated with the four dimensions of customer aggression. As presented above, customer aggression is often associated with customer incivility, misbehaviour and, in the extreme, violence. To test the criterion validity of the Customer Aggression scale, we used the 10-item Incivility scale by Wilson and Holmvall (2013), the four-item Customer Misbehaviour scale (Daunt and Harris, 2014), and the 10-item Workplace Violence scale (Dupré et al., 2014).

A commercial research organisation was employed to survey panel participants, ensuring the same respondents to the first survey were not invited to participate in the second survey. Participants were screened to confirm they currently worked within a retail or services frontline role. A survey link containing the 20 customer aggression items, 10 incivility items (Wilson and Holmvall, 2013), four customer misbehaviour items (Daunt and Harris, 2014), and 10 workplace violence items and sample demographic items were forwarded to participants. Further, a duration check was included to remove participants who answered the survey too quickly, two integrity-check questions and a marker variable were added to ensure the veracity of responses and control for CMB. Participants who failed either or both integrity-check items, completed the

survey too quickly or responded to items consistently across the entire survey were removed from the final sample of  $n = 389$ . The sample comprised 53% female, 44% male, 1% other, 2% undisclosed; 18–24 years 12%, 25–35 years 34%, 36–45 years 37%, 46–55 years 9%, 56–65 years 6%, over 65 years 1%, not disclosed 1%; fulltime 18%, part-time 41%, casual 39%, other 2%; employed within retail 32%, hospitality/food service 37%, tourism 5%, personal services 24%, clerical 2%; earning less than AUD\$30,000 7%, AUD\$30,001–\$50,000 10%, AUD \$50,001–\$70,000 34%, AUD\$70,001–\$90,000 37%, AUD\$90,001–\$110,000 7%, AUD\$110,001–\$130,000 3%, over AUD\$130,000 2%.

Another round of CFA was undertaken to confirm the measurement models. During this process, one PEA item (PEA4) was removed due to a cross-loading issue. The model had good model fit with  $\chi^2 (164) = 454.423$ ,  $\chi^2/df = 2.771$ ,  $p = 0.000$ , GFI = 0.890, TLI = 0.951, NFI = 0.935, CFI = 0.957, IFI = 0.958 and RMSEA = 0.068. Cronbach's alpha values for PEA (0.937), PIA (0.947), REA (0.933) and RIA (0.837) were above the cut-off value of 0.70. The Cronbach's alpha for the customer incivility, misbehaviour and workplace violence scales were 0.955, 0.906 and 0.990, respectively. Pearson's correlations are used to test the associations between the customer aggression dimensions and the three constructs. Specifically, PEA correlated significantly with all the criteria (customer incivility, misbehaviour and workplace violence), with coefficients of 0.700 ( $p < 0.001$ ), 0.378 ( $p < 0.001$ ) and 0.124 ( $p < 0.01$ ), respectively. PIA also correlated significantly with customer incivility, misbehaviour and workplace violence, with coefficients of 0.719 ( $p < 0.001$ ), 0.384 ( $p < 0.001$ ) and 0.155 ( $p < 0.01$ ), respectively. REA correlated significantly with these same criteria, with coefficients of 0.466 ( $p < 0.001$ ), 0.153 ( $p < 0.01$ ) and 0.154 ( $p < 0.01$ ), respectively. Finally, RIA correlated significantly with customer incivility, misbehaviour and workplace violence, with coefficients of 0.707 ( $p < 0.001$ ), 0.401 ( $p < 0.01$ ) and 0.192 ( $p < 0.01$ ), thereby establishing criterion validity of the four dimensions of the Customer Aggression scale.

#### 4.5. Stage 5: nomological validity – study 5

Nomological validity is the extent to which the construct of interest – in this case, customer aggression – behaves as it should with other constructs that are hypothesised to be related to that concept (Bagozzi, 1981; Campbell, 1960). It is predicted that sustained incidents of customer aggression will increase the emotional exhaustion employees experience (Mulki et al., 2006). Such emotional exhaustion will lead to greater levels of job stress (Parker and DeCotiis, 1983), which will increase organisational deviance and intentions to leave (Mortimer et al., 2021; Raza et al., 2021; Mulki et al., 2006).

##### 4.5.1. Customer aggression and emotional exhaustion

Emotional exhaustion is defined as being over-extended, fatigued or psychologically drained of emotional energy (Wright and Cropanzano, 1998). Sustained customer incivility and misbehaviour have been demonstrated to lower self-efficacy and increase job dissatisfaction and emotional exhaustion (Chan et al., 2022; Hur et al., 2015; Torres et al., 2017). Recent studies have evidenced that customer incivility results in significant negative psychological outcomes for retail workers (Hur et al., 2022). As presented previously, incivility, in contrast to aggression, has been defined as 'low-intensity' deviant behaviour that may include rudeness or being discourteous (Han et al., 2016). The researchers extend this idea, suggesting that logically proactive, reactive, expressive and inexpressive forms of customer aggression should also increase frontline retail employees' emotional exhaustion. Accordingly, we hypothesise:

**H1.** *Proactive-expressive aggression (PEA) positively impacts (increases) retail frontline employees' emotional exhaustion.*

**H2.** *Proactive-inexpressive aggression (PIA) positively impacts (increases) retail frontline employees' emotional exhaustion.*

**H3.** *Reactive-expressive aggression (REA) positively impacts (increases) retail frontline employees' emotional exhaustion.*

**H4.** *Reactive-inexpressive aggression (RIA) positively impacts (increases) retail frontline employees' emotional exhaustion.*

##### 4.5.2. Emotional exhaustion and job stress

Job stress, in contrast to general stress, combines organisational-related elements, such as company policies, workplace relationships and customer interactions (Parker and DeCotiis, 1983). Job stress is defined as a frontline employee's psychological reaction caused by sustained unpleasant feelings of being drained, over-extended or emotionally exhausted (Montgomery et al., 1996). Ashill et al. (2015) evidenced that job-related stress is an outcome of emotional exhaustion. Accordingly, we follow the common practice of using emotional exhaustion as the antecedent of job stress, as it provides the most consistent relationship within its nomological network (Halbesleben and Bowler, 2007) and is most readily portable to other contexts (Sun and Pan, 2008). As such, we hypothesise:

**H5.** *Retail frontline employees' emotional exhaustion will positively impact (increase) their job stress.*

##### 4.5.3. Outcomes of retail employee job stress

Potentially, job stress will impact frontline retail employees' behaviours (workplace deviance) and relationships (intention to leave) with their retail organisation. Beginning with workplace deviance, according to the role stress model (Behrman and Perreault, 1984) and coping theory (Lazarus and Folkman, 1984), elevated stress levels are associated with increased deviant behaviours (Swimberghe et al., 2014). Frontline service employees exposed to sustained customer mistreatment will experience job stress, which motivates them to engage in 'rule breaking' (Gaucher and Chebat, 2019). Recent research has confirmed retail employees are motivated to deviate from company policies to save time or avoid protracted emotionally distressful arguments (Fazel-e-Hasan et al., 2019; Mortimer et al., 2021; Mortimer and Wang, 2021). It is predicted job stress will increase employees' intentions to engage in deviant workplace behaviours. It is further determined that facing regular abuse leaves retail employees feeling emotionally exhausted, stressed and unlikely to continue their job (Lindblom et al., 2020; Pandey et al., 2021). According to the conservation of resources theory, employees attempt to gain, or at least retain, social and personal conditions (a supportive, friendly and safe work environment), which helps mitigate stressful workplace situations (Hobfoll et al., 2018). Exposure to sustained episodes of customer aggression will increase job stress, reducing these conditions, which may encourage employees to leave. Accordingly, positive relationships between the employee's job stress and their intention to engage in organisational deviance or leave the organisation are hypothesised:

**H6.** *Retail frontline employees' job stress positively impacts (increases) their organisational deviance behaviours.*

**H7.** *Retail frontline employees' job stress positively impacts (increases) their intention to leave their organisation.*

The outcomes of customer aggression are conceptualised in Fig. 1.

##### 4.5.4. Method

To establish the nomological validity of the Customer Aggression scale, a commercial research organisation was again employed to survey participants confirmed to be working within a retail or services frontline role. Checks ensured the same respondents to the first two surveys were not invited to participate in this survey. A survey link containing 19 customer aggression items, with the Emotional Exhaustion scale (Mulki et al., 2006), the Job Stress scale (Parker and DeCotiis, 1983), the Organisational Deviance scale (Mulki et al., 2006) and the Turnover Intention scale (Raza et al., 2021), and sample demographic items were

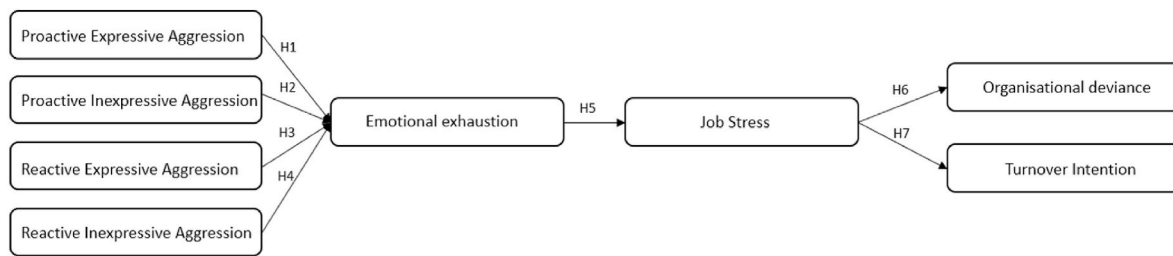


Fig. 1. Outcomes of customer aggression.

forwarded to participants. The same integrity and CMB controls were adopted as per Study 3 and Study 4. The final sample ( $n = 391$ ) comprised 57% female, 39% male, 4% undisclosed; 18–24 years 13%, 25–35 years 28%, 36–45 years 41%, 46–55 years 11%, 56–65 years 5%, not disclosed 2%; fulltime 16%, part-time 40%, casual 44%; employed within retail 31%, hospitality/food service 41%, tourism 3%, personal services 22%, clerical 3%; earning less than AUD\$30,000 2%, AUD\$30,001–\$50,000 25%, AUD\$50,001–\$70,000 39%, AUD\$70,001–\$90,000 23%, AUD\$90,001–\$110,000 6%, AUD\$110,001–\$130,000 3%, and 2% not disclosed.

## 5. Data analysis

A CFA was undertaken to examine the measurement models of the study's latent constructs. The same model assessment criteria in Study 3 were used in this study. The final CFA model had good model fit, with  $\chi^2(566) = 1187.933$ ,  $\chi^2/df = 2.099$ ,  $p = 0.000$ , GFI = 0.851, TLI = 0.945, NFI = 0.910, CFI = 0.950, IFI = 0.951 and RMSEA = 0.053. All the constructs had good reliability with a Cronbach's alpha greater than 0.7, a Composite Reliability greater than 0.7 and an AVE greater than 0.5. All factor loadings were greater than 0.7. Discriminant validity was achieved as all correlations were lower than the square root of AVE (see Table 7).

Again, CMB was examined in the same two ways as described in Study 3. Harman's single-factor test extracted by the first factor accounted for only 17.1% of the variance (Podsakoff et al., 2003). Only one restricted model was needed because the unconstrained model was significantly better than the constrained model (Table 8). There was no significant  $\chi^2$  change between the baseline model and the constrained models or between the restricted models and the constrained/unconstrained models.

Hypothesised relationships were drawn into a model after the measurement models' reliability and validity tests. The model had a good model fit (Table 9) with  $\chi^2(581) = 1250.565$ ,  $\chi^2/df = 2.152$ ,  $p = 0.000$ , GFI = 0.843, TLI = 0.942, NFI = 0.905, CFI = 0.947, IFI = 0.947 and RMSEA = 0.054. Emotional exhaustion increased with PEA ( $\beta = 0.196$ ,  $t = 2.353$ ,  $p < 0.05$ ), PIA ( $\beta = 0.189$ ,  $t = 2.132$ ,  $p < 0.05$ ), RIA ( $\beta = 0.224$ ,  $t = 2.192$ ,  $p < 0.05$ ) and REA ( $\beta = -0.198$ ,  $t = 3.243$ ,  $p < 0.01$ ). Therefore, H1, H2, H3 and H4 were supported. Job stress increased significantly with emotional exhaustion ( $\beta = 0.678$ ,  $t = 12.821$ ,  $p < 0.001$ ) and H5 was supported. Increased job stress was positively associated with organisational deviance behaviours ( $\beta = 0.320$ ,  $t = 5.238$ ,  $p < 0.001$ ) and employees' intention to leave their organisations ( $\beta = 0.490$ ,  $t = 8.959$ ,  $p < 0.001$ ). Therefore, H6 and H7 were both supported.

## 6. Discussion

Anecdotally, customer aggression directed toward frontline employees conjures up images of violent interactions. Reports of assaults, verbal attacks and threats, becoming now synonymous with working in the retail and services sector (Vromen et al., 2021; Lillis, 2020; Wiggins, 2021). However, these extreme instances are simply examples that are visual and easily detected. These occurrences are captured through existing workers' unions and retailer surveys, based on current industry

knowledge. However, as evidenced above, customer aggression is a far more complex, multi-dimensional phenomenon. Previous attempts to examine customer aggression have been constrained to one element of aggression i.e., verbal (Cho et al., 2020; Wang et al., 2011), have been contextually bound i.e., call centres (Grandey et al., 2004) or limited to one culture, i.e. Middle-Eastern or Chinese (Karatepe, 2011; Li and Zhou, 2013). Other attempts have relied on 'adapted' supervisory aggression scales, i.e., Huang and Dootson (2022). While previous literature has pointed to the possible dimensionality of customer aggression (see Dormann and Zapf, 2004), this is the first study to empirically validate the multi-dimensional element of customer aggression.

### 6.1. Contributions to knowledge

This research offers several contributions to existing knowledge of the customer aggression phenomenon. First, unlike previous attempts to measure customer aggression, this work takes into consideration the specific characteristics of the 'employee–customer' encounter, denoted by customer sovereignty (Korczyński and Ott, 2004), employee low-status shield (Kolb, 2007), and the anonymous and disconnected nature of the interaction (Korczyński and Evans, 2013). As explained by displaced aggression theory (Dollard et al., 1939), this is the first comprehensive instrument for measuring the forms of customer aggression faced by frontline employees in the retail and services sector. For example, a customer denied a refund due to a company policy, may react by throwing the product at a young employee, yelling, or simply staring in a intimidating manner. These aggressive behaviours result because the customer perceives they are unable to overcome policy constraints, concentrating their aggressive behaviours toward the employee, instead of the company itself. Second, this research contributes to the retailing and services literature by categorising the various types of customer aggression and developing and validating a parsimonious scale. A comprehensive theoretical understanding of the customer aggression construct has been offered that can serve as a base for further quantitative and experimental studies. Third, this research adds to the existing consumer misbehaviour literature by providing further insight into the influence of this construct on frontline employees' attitudinal, behavioural and performance outcomes.

The emergence of PIA, which includes consumer dishonesty, supports the call for research on consumer deviant behaviour, which has also been labelled as dysfunctional, aberrant, opportunistic and problematic behaviours (Harris and Daunt, 2011; Greer, 2015). From the consumer rationalisation perspective, Markin (1979) argued that the psychological process of consumers rationalisation could result in either rational or irrational behaviour. Consumers could also go through a rationalisation process to neutralise deviant behaviours (Harris and Daunt, 2011). For example, Harris and Daunt (2011) found that consumers intentionally shared false negative WOM because they believed that some white lies were beneficiary for both consumers and service providers. As established herein, the four dimensions of customer aggression predict employees' emotional exhaustion, which in turn causes job stress that leads to undesirable outcomes such as deviant behaviour and turnover intention.



**Table 7**  
CFA results – Study 5.

		Standardised loadings	Cronbach's Alpha	Composite Reliability	Average Variance Explained
<b>Proactive-Expressive Aggression</b>		0.937	0.937	0.714	
PEA1	Customers make direct verbal threats to get a refund.	0.780			
PEA2	To 'get what they want', customers yell aggressively.	0.871			
PEA3	To obtain benefits they are not entitled to, customers will raise their voices in a threatening manner.	0.876			
PEA4	Customers seek to 'get something for nothing' by using hostile language.	0.874			
PEA5	Customers swear to obtain more favourable outcomes.	0.843			
PEA6	To get financial benefits, customers can be insulting.	0.820			
<b>Proactive-Inexpressive Aggression</b>		0.947	0.947	0.750	
PIA1	To get their own way, customers will make misrepresentations about the service they receive.	0.823			
PIA2	Customers post false reviews about their service experience to obtain benefits.	0.841			
PIA3	To attain better service outcomes, customers falsely complain about the way they were served.	0.890			
PIA4	Dishonestly complaining is a way customers get what they want.	0.846			
PIA5	To obtain an advantage, customers put in false complaints about the way they were served.	0.914			
PIA6	To take advantage, customers will proactively post fake comments about the service they received.	0.877			
<b>Reactive-Expressive Aggression</b>		0.933	0.933	0.777	
REA1	When customers believe their problems are not resolved, their reaction is to become physically aggressive.	0.854			
REA2	In response to perceived poor service, customers have reacted aggressively by throwing things.	0.868			
REA3	Customers will become physically hostile when they are not satisfied with the service they receive.	0.918			
REA4	Getting 'physically aggressive' is becoming the norm when complaints aren't handled well.	0.885			
<b>Reactive-Inexpressive Aggression</b>		0.837	0.843	0.643	
RIA1	Customers simply ignore reasonable requests when they believe something has gone wrong.	0.826			
RIA2	My advice is ignored by customers when they believe a service failure has occurred.	0.867			
RIA3	Customers just disregard my suggestions when I am trying to serve them.	0.704			
<b>Emotional Exhaustion</b>		0.966	0.966	0.804	
EE1	I would feel emotionally drained from my work.	0.881			
EE2	I would feel fatigued in the morning, having to face another day on the job.	0.939			
EE3	I would feel burned out from my work.	0.948			
EE4	I would feel frustrated by my job.	0.901			
EE5	I would feel used up at the end of the workday.	0.896			
EE6	I would feel like I'm at the end of my rope.	0.865			
EE7	I would feel I am working too hard on my job.	0.841			
<b>Job Stress</b>		0.889	0.892	0.674	
JS1	I have felt fidgety or nervous as a result of my job.	0.780			
JS2	My job gets to me more than it should.	0.895			
JS3	There are lots of times when my job drives me right up the wall.	0.838			
JS4	Sometimes when I think about my job, I get a tight feeling in my chest.	0.765			
<b>Organisational Deviance</b>		0.787	0.789	0.556	
OD1	I intentionally worked slower than I could have worked.	0.730			
OD2	I came in late to work without permission.	0.720			
OD3	I put little effort into my work.	0.785			
<b>Turnover Intention</b>		0.877	0.880	0.711	
TI2	I intend to leave this company shortly.	0.912			
TI3	I have decided to quit this organisation.	0.845			
TI4	I am looking at some other jobs now.	0.767			

## Discriminant Validity

	PEA	PIA	REA	RIA	EE	JS	OD	TI
Proactive-Expressive Aggression (PEA)	0.845							
Proactive-Inexpressive Aggression (PIA)	0.716	0.866						
Reactive-Expressive Aggression (REA)	0.514	0.549	0.881					
Reactive-Inexpressive Aggression (RIA)	0.742	0.770	0.544	0.802				
Emotional Exhaustion (EE)	0.389	0.389	0.125	0.402	0.897			
Job Stress(JS)	0.445	0.386	0.172	0.428	0.671	0.821		

(continued on next page)

Table 7 (continued)

Discriminant Validity	PEA	PIA	REA	RIA	EE	JS	OD	TI
Organisational Deviance (OD)	0.187	0.227	0.251	0.159	0.228	0.303	0.843	
Turnover Intention (TI)	0.282	0.237	0.111	0.219	0.363	0.476	0.367	0.746

Note: The diagonal values are the square root of AVE and the half-diagonal values are inter-construct correlations.

Table 8

Marker variable test for CMB – Study 5.

Model	$\chi^2$ (df)	CFI	RMSEA (90% CI)	Comparison Model	Likelihood Ratio test of $\chi^2$ change
CFA with marker variable	1338.461 (666)	0.949	0.051 (0.047, 0.055)		
Baseline	1381.519 (680)	0.947	0.052 (0.048, 0.055)		
Constrained	1380.73 (679)	0.947	0.052(0.048, 0.056)	vs Baseline	0.789, df = 1, p = 0.374
Unconstrained	1291.991 (644)	0.951	0.051 (0.047,0.055)	vs Constrained	88.739, df = 35, p = 0.000
Restricted	1293.929 (672)	0.953	0.049 (0.045,0.053)	vs Unconstrained	1.938, df = 28, p = 1.000

Note: df - Degree of Freedom; CI – Confidence Interval.

Table 9

Test of hypotheses for nomological validity.

Hypotheses Tests	$\beta$	t-value	p-value
H1 Proactive-expressive aggression → Emotional exhaustion	0.196	2.353	0.019
H2 Proactive-inexpressive aggression → Emotional exhaustion	0.189	2.132	0.033
H3 Reactive-expressive aggression → Emotional exhaustion	0.198	3.243	0.001
H4 Reactive-inexpressive aggression → Emotional exhaustion	0.224	2.192	0.028
H5 Emotional exhaustion → Job stress	0.678	12.821	<0.001
H6 Job stress → Organisational deviant	0.320	5.238	<0.001
H7 Job stress → Turnover intention	0.490	8.959	<0.001
<b>R<sup>2</sup></b>			
Emotional exhaustion	0.217		
Job stress	0.459		
Organisational deviant	0.103		
Turnover intention	0.241		

Note:  $\beta$  means standardised regression weight.

### 6.2. Practical implications

This study offers important implications for managers. First, aggression should be treated as any other workplace hazard that needs to be accurately identified, measured and prevented. One of the challenges facing industry is a lack of broad awareness of the complex, multifaceted nature of customer aggression. Attempts to capture and measure customer aggression have been facilitated via workers’ unions or retailer surveys – reporting ‘aggression’ as simply a single item construct, i.e., were you ‘abused’, ‘threatened’ or ‘assaulted’? However, as evidenced above, customer aggression is a far more complex, multi-dimensional phenomenon. Accordingly, this study offers managers an easy-to-administer measurement tool to assess the extent and type of aggression their employees face. Second, this work evidences the effects of customer aggression on employee turnover are moderated by organisational support, i.e., greater management support, reduces intention to leave. Employing this scale across a workforce will enable managers to identify the types of customer aggression that employees are subjected to, and where these incidents are more frequently occurring, thus assisting managers to design appropriate mitigation strategies. For instance, managers may increase the number of supervisors at checkout areas, or install video surveillance at ‘refund/returns’ counters. Third, as employee turnover continues to represent one of the most significant challenges in the retail and services sector, reactive or disorganised support for employees is insufficient to improve their experiences at work and increase retention rates (Liu-Lastres et al., 2022). Informed by the matrix of aggressive behaviours, managers may develop

customised solutions or service scripts relevant to specific service interactions. Fourth, Liu et al. (2022) found the relationship between customer aggression and job stress was weaker in organisations where employees had a ‘collective voice’. Thus, employing the scale to facilitate regular monitoring of customer aggression may serve as a tool to capture the shared experience of employees, allowing them to collectively contribute to solutions. Finally, retail associations and workers’ unions internationally are calling on governments to provide support through campaigns and policy reforms to mitigate the increasing customer abuse (see National Retail Association, 2022; Lillis, 2020; Wiggins, 2021). This scale may also be of particular interest to agencies responsible for developing, implementing and monitoring public policy promoting and supporting employee wellbeing.

### 7. Limitations and future research directions

The results indicate that PEA (aimed to obtain a benefit) was related only to verbal and not to physical aggression. In contrast, REA (as a response to a negative situation) is more likely to involve physical expressions of aggression rather than verbal responses. A possible explanation for this result lies in the consumer’s purpose behind the aggression. The ‘reactive’ type refers to consumers’ spontaneous efforts to vent and ‘act-out’. On the other hand, the ‘proactive’ type involves a planned and even manipulative effort, where the objective is to obtain something, a discount, an upgrade. Thus, we posit that the manifestation of aggressive behaviour differs according to the customer’s objective in each situation. Further research should be undertaken to provide evidence for this assumption. In line with this, nomological validity was established by examining the scale as a predictor to variables (emotional exhaustion, job stress, organisational deviance, intentions to leave) previously established in the literature. While such an approach has been adopted in previous works (see Agarwal et al., 2015; Lings and Greenley, 2005; Mortimer et al., 2018), an opportunity lies in identifying the drivers of the specific dimensions of customer aggression.

Future research may also assess the extent to which each customer aggression type individually affects the different attitudinal and behavioural outcomes tested herein. Both expressive aggression forms may be stronger drivers of negative outcomes, whereas inexpressive aggression forms may have milder effects as they are more tolerated. Notions of aggression, as well as its frequency and form, may vary according to customers’ cultural backgrounds (Kawabata et al., 2016). Moreover, perceptions of what constitutes aggression may differ between cultures. This scale can, therefore, also be of assistance in the context of cross-cultural consumer research; for instance, those who score higher in the power distance index may not consider some issues included in the present scale as aggression.

A natural progression of this work is the exploration of more complex

predictive models through the incorporation of mediating and/or moderating variables. For instance, specific groups may be more likely to encounter customer aggression (i.e., younger, female, migrant workers, or vulnerable groups). Factors that trigger prejudice against these groups could serve as moderating variables. The effects of aggression may vary if the customer is considered an ingroup versus an outgroup member (Pedersen et al., 2008). In the same vein, the effect of customer aggression on employees' emotional state could be stronger when the aggressive customer is a public figure and the anonymity principle (Korczyński and Evans, 2013) of regular customer–employee interactions is violated. Lastly, further work might investigate other outcome variables. For example, it would be fruitful to explore whether customer aggression triggers displaced aggression (Dollard et al., 1939) toward coworkers or supervisors in 'customer-is-always-right' environments.

### Declaration of competing interest

To confirm, the authors and I have no conflict of interest in relation to the publication of this work. Warm wishes, Professor Gary Mortimer.

### Data availability

Data will be made available on request.

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